

V. Balasubramanian

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:ssspta1611bxv

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Dec 17 The CA Lexicon available in the CAPLUS and CA files  
NEWS 3 Feb 06 Engineering Information Encompass files have new names  
NEWS 4 Feb 16 TOXLINE no longer being updated  
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure  
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA  
NEWS 7 May 07 DGENE Reload  
NEWS 8 Jun 20 Published patent applications (A1) are now in USPATFULL  
NEWS 9 JUL 13 New SDI alert frequency now available in Derwent's  
DWPI and DPCI  
NEWS 10 Aug 23 In-process records and more frequent updates now in  
MEDLINE  
NEWS 11 Aug 23 PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA  
NEWS 12 Aug 23 Adis Newsletters (ADISNEWS) now available on STN  
  
NEWS EXPRESS August 15 CURRENT WINDOWS VERSION IS V6.0c,  
CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),  
AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 16:30:18 ON 08 SEP 2001

=> file lcasreact

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

09/719,508

V. Balasubramanian

Trying 3106016892...Open

Welcome to STN International! Enter x:x

LOGINID:ssspta1611bxv

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 Dec 17 The CA Lexicon available in the CAPLUS and CA files  
NEWS 3 Feb 06 Engineering Information Encompass files have new names  
NEWS 4 Feb 16 TOXLINE no longer being updated  
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure  
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA  
NEWS 7 May 07 DGENE Reload  
NEWS 8 Jun 20 Published patent applications (A1) are now in USPATFULL  
NEWS 9 JUL 13 New SDI alert frequency now available in Derwent's  
DWPI and DPCI  
NEWS 10 Aug 23 In-process records and more frequent updates now in  
MEDLINE  
NEWS 11 Aug 23 PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA  
NEWS 12 Aug 23 Adis Newsletters (ADISNEWS) now available on STN  
NEWS 13 Sep 17 IMSworld Pharmaceutical Company Directory name change  
to PHARMASEARCH  
NEWS 14 Oct 09 Korean abstracts now included in Derwent World Patents  
Index  
NEWS 15 Oct 09 Number of Derwent World Patents Index updates increased  
NEWS 16 Oct 15 Calculated properties now in the REGISTRY/ZREGISTRY File  
NEWS 17 Oct 22 Over 1 million reactions added to CASREACT  
NEWS 18 Oct 22 DGENE GETSIM has been improved  
  
NEWS EXPRESS August 15 CURRENT WINDOWS VERSION IS V6.0c,  
CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP),  
AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

V. Balasubramanian

FILE 'HOME' ENTERED AT 14:49:37 ON 22 OCT 2001

=> file casreact

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.15

0.15

FILE 'CASREACT' ENTERED AT 14:49:46 ON 22 OCT 2001

USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1974 - 21 Oct 2001 VOL 135 ISS 17

Some records from 1974 to 1991 are derived from the ZIC/VINITI data file and provided by InfoChem.

This file contains CAS Registry Numbers for easy and accurate substance identification.

Structure search limits have been increased. See HELP SLIMIT for details.

Crossover limits have been increased. See HELP RNCROSSOVER for details.

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>

Uploading C:\STNEXP4\QUERIES\19719508.str

L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> d l1

L1 HAS NO ANSWERS

L1 STR

Hy—S



Hy—Cl

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 14:50:17 FILE 'CASREACT'

09/719,508

V. Balasubramanian

must be entered on the same line as DISPLAY, e.g.,  
D SCAN.)

SSRX ----- Single-Step Reactions (Map, Diagram, and Summary for  
all single-step reactions)

STD ----- BIB, IPC, and NCL

CRD ----- Compact Display of All Hit Reactions

CRDREF ----- Compact Reaction Display and SO, PY for Reference

FHIT ----- Reaction Map, Diagram, and Summary for first  
hit reaction

FHITCBIB --- FHIT, AN plus CBIB

FCRD ----- First hit in Compact Reaction Display (CRD) format

FCRDREF ----- First hit in Compact Reaction Display (CRD) format with  
CA reference information (SO, PY). (Default)

FPATH ----- PATH, plus Reaction Summary for the "long path"

FSPATH ----- SPATH, plus Reaction Summary for the "short path"

HIT ----- Reaction Map, Reaction Diagram, and Reaction  
Summary for all hit reactions and fields containing  
hit terms

OCC ----- All hit fields and the number of occurrences of the  
hit terms in each field. Includes total number of  
HIT, PATH, SPATH reactions. Labels reactions that have  
incomplete verifications.

PATH ----- Reaction Map and Reaction Diagram for the "long  
path". Displays all hit reactions, except those  
whose steps are totally included within another hit  
reaction which is displayed

RX ----- Hit Reactions (Map, Diagram, Summary for all hit reactions)

RXG ----- Hit Reaction Graphics (Map and Diagram for all hit reactions)

RXL ----- Hit Reaction Long (Map, Diagram, Summary for all hit reactions)

RXS ----- Hit Reaction Summarizers (Map and Summary for all hit reactions)

SPATH ----- Reaction Map and Reaction Diagram for the "short  
path". Displays all single step reactions which  
contain a hit substance. Also displays those  
multistep reactions that have a hit substance in both  
the first and last steps of the reaction, except for  
those hit reactions whose steps are totally included  
within another hit reaction which is displayed

To display a particular field or fields, enter the display field  
codes. For a list of the display field codes, enter HELP DFIELDS  
at an arrow prompt (=>). Examples of combinations include: D TI;  
D BIB RX; D TI, AU, FCRD. The information is displayed in the same order  
as the specification. All of the formats, except CRD, CRDREF, FHIT, PATH,  
FPATH, SPATH, FSPATH, FCRD, FCRDREF, HIT, RX, RXG, RXS, SCAN, and OCC, may  
be used with the DISPLAY command to display the record for a specified  
Accession Number.

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):6

L3 7 ANSWERS CASREACT COPYRIGHT 2001 ACS

TI The reaction of 9-(2',3'-dideoxy-.beta.-D-glycero-pent-2-  
enofuranosyl)adenine derivatives with arene- and alkanesulfonyl  
chlorides.

An unusual ring opening reaction of thiiranium ions

V. Balasubramanian

SCREENING COMPLETE - 7337 REACTIONS TO VERIFY FROM 1004 DOCUMENTS

68.1% DONE 5000 VERIFIED 22 HIT RXNS 7 DOCS  
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)  
SEARCH TIME: 00.00.04

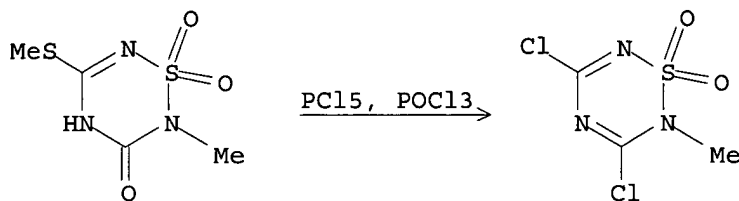
FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED VERIFICATIONS: 141674 TO 151806  
PROJECTED ANSWERS: 10 TO 388

L3 7 SEA SSS SAM L1 ( 22 REACTIONS)

=> d scan l3 1-7  
'1-7' IS NOT A VALID FORMAT FOR FILE 'CASREACT'

L3 7 ANSWERS CASREACT COPYRIGHT 2001 ACS

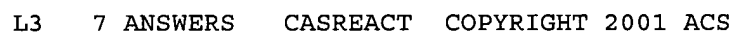
TI 2(6)-Alkyl-3,5-diamino-1,2,4,6-thiatriazine 1,1-dioxides. Part I  
RX(1) OF 56



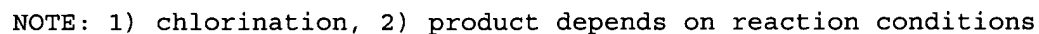
The following are valid formats:

ABS ----- GI and AB  
ALL ----- BIB, AB, IND, RE, Single-step Reactions  
APPS ----- AI, PRAI  
BIB ----- AN, plus Bibliographic Data  
CAN ----- List of CA abstract numbers without answer numbers  
CBIB ----- AN, plus Compressed Bibliographic Data  
DALL ----- ALL, delimited (end of each field identified)  
IABS ----- ABS, indented with text labels  
IALL ----- ALL, indented with text labels  
IBIB ----- BIB, indented with text labels  
IND ----- Indexing data  
IPC ----- International Patent Classifications  
ISTD ----- STD, indented with text labels  
OBIB ----- AN, plus Bibliographic Data (original)  
OIBIB ----- OBIB, indented with text labels  
  
SBIB ----- BIB, no citations  
SIBIB ----- IBIB, no citations  
  
MAX ----- Same as ALL  
PATS ----- PI, SO  
SCAN ----- TI and FCRD (random display, no answer number. SCAN

RX (29) OF 173



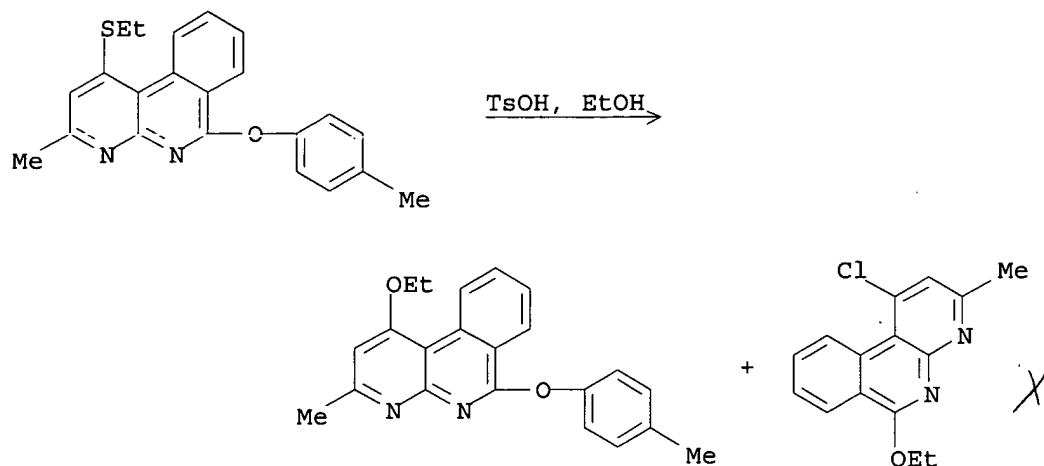
RX (38) OF 70 - 2 STEPS



TI Nucleophilic substitution reactions in benzo[c][1,8]naphthyridines

V. Balasubramanian

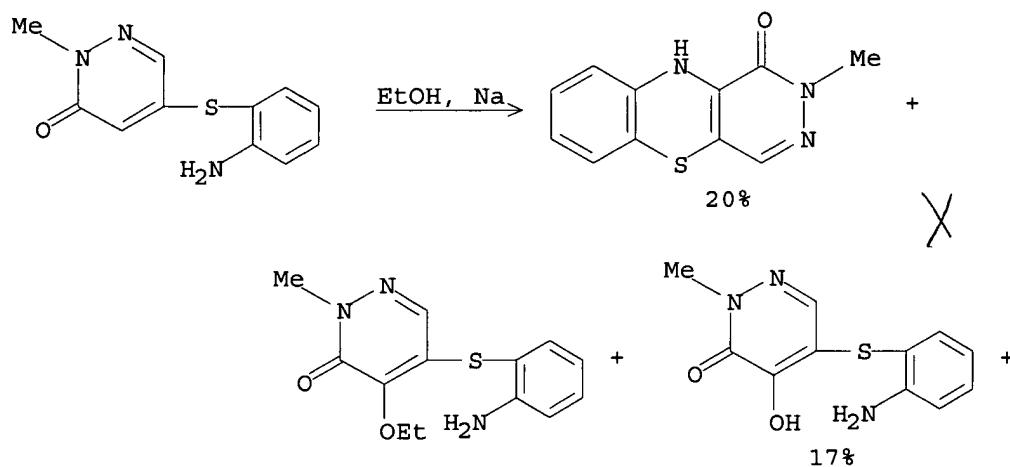
RX(20) OF 98



L3 7 ANSWERS CASREACT COPYRIGHT 2001 ACS

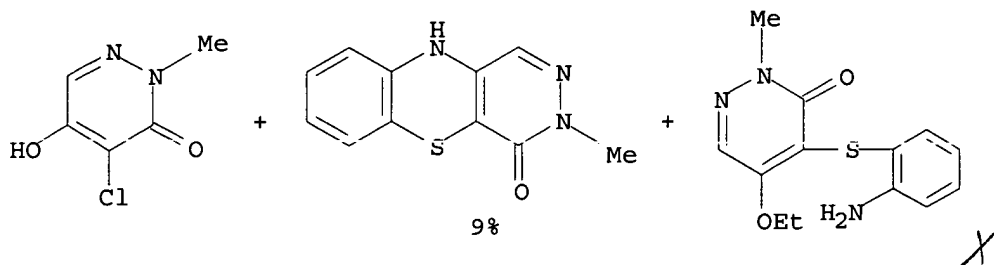
TI Studies on pyridazinone derivatives. XIII. Unusual displacement reaction  
of 5-(o-aminophenylthio)-4-chloro-2-methyl-3(2H)-pyridazinone with alkali

RX(1) OF 29



V. Balasubramanian

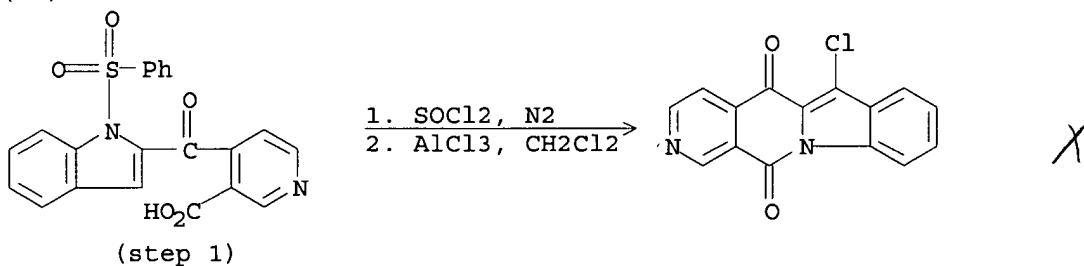
RX(1) OF 29



L3 7 ANSWERS CASREACT COPYRIGHT 2001 ACS

TI A convenient synthesis of 3-acylindoles via Friedel Crafts acylation of 1-(phenylsulfonyl)indole. A new route to pyridocarbazole-5,11-quinones and ellipticine

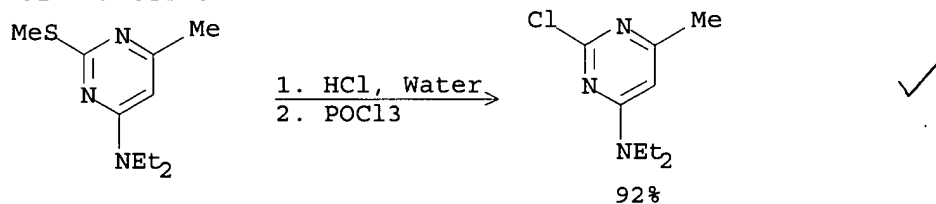
RX(24) OF 73



L3 7 ANSWERS CASREACT COPYRIGHT 2001 ACS

TI Pyrimidines. 8. Chlorination of 6-methyluracil with phosphorus oxychloride in the presence of trialkylamines

RX(44) OF 61 - 2 STEPS



ALL ANSWERS HAVE BEEN SCANNED

=> s l1 sss ful

FULL SEARCH INITIATED 14:51:03 FILE 'CASREACT'

SCREENING COMPLETE - 155211 REACTIONS TO VERIFY FROM 20903 DOCUMENTS

100.0% DONE 155211 VERIFIED

762 HIT RXNS

199 DOCS

09/719,508



V. Balasubramanian

SEARCH TIME: 00.00.11

L4 199 SEA SSS FUL L1 ( 762 REACTIONS)

=> d l4 bib 1-199

L4 ANSWER 1 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 135:152806 CASREACT

TI Preparation of fused 2-chlorobenzimidazoles by chlorination of fused 1,3-dihydrobenzimidazol-2-thiones using chlorine.

IN Weintritt, Holger; Lantzsch, Reinhard; Mueh, Thorsten; Conrad, Michael

PA Bayer A.-G., Germany

SO Ger. Offen., 6 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10005277	A1	20010809	DE 2000-10005277	20000207
	WO 2001058903	A1	20010816	WO 2001-EP796	20010125
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI DE 2000-10005277 20000207

OS MARPAT 135:152806

L4 ANSWER 2 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 134:86158 CASREACT

TI Method for preparation of hydroxy-2-halogenopyridine derivatives

IN Shimizu, Kazuya; Kuwayama, Tomoya; Asanuma, Goro

PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001002643	A2	20010109	JP 1999-174287	19990621
OS	MARPAT 134:86158				

L4 ANSWER 3 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 134:17639 CASREACT

TI Synthesis of (1.fwdarw.4)-Linked 2-Deoxy-2-fluoroglucose Oligomers. 1

AU Sugiyama, Shin; Haque, Wasim; Diakur, James

CS Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta,

V. Balasubramanian

Edmonton, AB, T6G 2N8, Can.  
SO Org. Lett. (2000), 2(22), 3489-3491  
CODEN: ORLEF7; ISSN: 1523-7060  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 23  
RE  
(3) Dess, D; Synthesis 1981, P883 CAPLUS  
(4) Garegg, P; Carbohydr Res 1981, V93, PC10 CAPLUS  
(5) Gessler, K; Proc Natl Acad Sci U S A 1999, V96, P4246 CAPLUS  
(6) Hanessian, S; Carbohydr Res 1977, V53, PC13 CAPLUS  
(7) Helferich, B; Liebigs Ann Chem 1949, V563, P139 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 133:351506 CASREACT  
TI Aza-benzazolium-containing cyanine dyes and their use in fluorescent  
biological stains  
IN Haugland, Richard P.; Yue, Stephen T.  
PA Molecular Probes, Inc., USA  
SO PCT Int. Appl., 87 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
-----  
PI WO 2000066664 A1 20001109 WO 2000-US11549 20000426  
W: AU, CA, JP  
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE  
PRAI US 1999-131782 19990430  
US 1999-158859 19991012  
RE.CNT 8  
RE  
(1) Ficken, G; JOURNAL OF THE CHEMICAL SOCIETY 1959, P3202 CAPLUS  
(2) Ilford Limited; GB 870753 A 1961 CAPLUS  
(3) Jenkins, P; US 3326688 A 1967 CAPLUS  
(4) Molecular Probes Inc; US 5863753 A CAPLUS  
(5) Molecular Probes Inc; WO 9613552 A 1996 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 133:335186 CASREACT  
TI Neighboring effect of pyrazole rings: regio- and stereoselective  
Wagner-Meerwein rearrangement in electrophilic addition reactions of  
norbornadiene-fused pyrazoles  
AU Kobayashi, Tomoshige; Uchiyama, Yosuke  
CS Faculty of Science, Department of Chemistry, Shinshu University, Asahi,  
Matsumoto, 390-8621, Japan  
SO Perkin 1 (2000), (16), 2731-2739  
CODEN: PERKF9  
PB Royal Society of Chemistry

V. Balasubramanian

DT Journal

LA English

RE.CNT 25

RE

- (2) Bartlett, P; J Org Chem 1984, V49, P1880 CAPLUS
- (3) Davis, A; J Chem Soc, Chem Commun 1980, P639 CAPLUS
- (4) Dudley, T; J Org Chem 1999, V64, P1247 CAPLUS
- (6) Ermolaeva, V; Zh Org Khim 1981, V17, P1554 CAPLUS
- (7) Kobayashi, T; Bull Chem Soc Jpn 1998, V71, P1443 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 133:296524 CASREACT

TI Synthesis of racemic chiral-at-metal complexes of the Group 4 metals

AU Alcock, N. W.; Clase, H. J.; Duncalf, D. J.; Hart, S. L.; McCamley, A.; McCormack, P. J.; Taylor, P. C.

CS Department of Chemistry, University of Warwick, Coventry, CV4 7AL, UK

SO J. Organomet. Chem. (2000), 605(1), 45-54

CODEN: JORCAI; ISSN: 0022-328X

PB Elsevier Science S.A.

DT Journal

LA English

RE.CNT 23

RE

- (1) Abel, E; J Chem Soc Dalton Trans 1973, P1706 CAPLUS
- (2) Brintzinger, H; Angew Chem Int Ed Engl 1995, V34, P1143 CAPLUS
- (3) Bristow, G; J Chem Soc Dalton Trans 1984, P399 CAPLUS
- (5) Couturier, S; J Organomet Chem 1978, V157, PC61 CAPLUS
- (6) Couturier, S; J Organomet Chem 1980, V195, P291 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 133:267053 CASREACT

TI A Convenient Preparation of Glycosyl Chlorides from Aryl/Alkyl Thioglycosides

AU Sugiyama, Shin; Diakur, James M.

CS Faculty of Pharmacy & Pharmaceutical Sciences, University of Alberta, Edmonton, AB, T6G 2N8, Can.

SO Org. Lett. (2000), 2(17), 2713-2715

CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

RE.CNT 32

RE

- (1) Bonner, W; J Am Chem Soc 1948, V70, P3491 CAPLUS
- (2) Cao, S; J Carbohydr Chem 1998, V17, P609 CAPLUS
- (3) Crich, D; Chem Commun 1998, P2763 CAPLUS
- (4) Fugedi, P; Glycoconjugate J 1987, V4, P97 CAPLUS
- (5) Garcia, B; J Am Chem Soc 1997, V119, P7597 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 199 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

AN 133:252401 CASREACT  
TI Synthesis and structure-activity relationship studies of conformationally restricted analogs of 2-chloro-4-trifluoromethylpyrimidine-5-[N-(3',5'-bis(trifluoromethyl)phenyl)]carboxamide  
AU Palanki, Moorthy S. S.; Erdman, Paul E.; Goldman, Mark E.; Suto, Carla; Suto, Mark J.  
CS Departments of Medicinal Chemistry, Signal Pharmaceuticals, Inc., San Diego, CA, 92121, USA  
SO Med. Chem. Res. (2000), 10(1), 19-29  
CODEN: MCREEB; ISSN: 1054-2523  
PB Birkhaeuser Boston  
DT Journal  
LA English  
RE.CNT 14  
RE  
(1) Arukwe, J; Acta Chemica Scandinavica 1986, VB40, P764 CAPLUS  
(2) Font, J; Anales de quimica 1983, V79, P149 CAPLUS  
(4) Lewis, A; Emerging Drugs: The prospect for Improved Medicines 1996, P31 CAPLUS  
(5) Manning, A; Drug Discovery Today 1996, V1, P151 CAPLUS  
(6) Manning, A; Exp Opin Invest Drugs 1997, V6, P555 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 133:237952 CASREACT  
TI Dimethyl acetylsuccinate as a versatile synthon in heterocyclic chemistry - a facile synthesis of heterocyclic acetic acid derivatives  
AU Craig, G. Wayne; Eberle, Martin; Lamberth, Clemens; Vettiger, Thomas  
CS Research Department, Novartis Crop Protection AG, Basel, Switz.  
SO J. Prakt. Chem. (Weinheim, Ger.) (2000), 342(5), 504-507  
CODEN: JPCHF4; ISSN: 1436-9966  
PB Wiley-VCH Verlag GmbH  
DT Journal  
LA English  
RE.CNT 29  
RE  
(1) Beccalli, E; J Org Chem 1987, V52, P1666 CAPLUS  
(2) Bessard, Y; Tetrahedron 1999, V55, P405 CAPLUS  
(3) Bobarevic, B; Folia Med Fac Med Univ Saraeviensis 1984, V19, P77 CAPLUS  
(4) Bougrin, K; Tetrahedron Lett 1994, V35, P8373 CAPLUS  
(5) Brown, D; Aust J Chem 1977, V30, P621 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 132:334370 CASREACT  
TI Lewis Acid-Directed Cyclocondensation of Piperidone Enol Ethers with 2-Methoxy-4-(N-phenylsulfonyl)-1,4-benzoquinoneimine: A New Regioselective Synthesis of Oxygenated Carbolines  
AU Engler, Thomas A.; Wanner, Jutta  
CS Department of Chemistry, University of Kansas, Lawrence, KS, 66045, USA  
SO J. Org. Chem. (2000), 65(8), 2444-2457  
CODEN: JOCEAH; ISSN: 0022-3263  
PB American Chemical Society

V. Balasubramanian

DT Journal  
LA English  
RE.CNT 91

RE

- (1) Abou-Gharbia, M; J Med Chem 1987, V30, P1100 CAPLUS
- (2) Abou-Gharbia, M; J Med Chem 1987, V30, P1818 CAPLUS
- (3) Adams, R; Bull Chim Soc Fr 1958, P23 CAPLUS
- (4) Audia, J; J Med Chem 1996, V39, P2773 CAPLUS
- (5) Bachand, B; Organometallics 1991, V10, P2015 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 132:208023 CASREACT  
TI Template-directed intramolecular C-glycosidation. Cation-mediated synthesis of keto-oxetanes from thioglycosides  
AU Craig, Donald; Munasinghe, V. Ranjit N.; Tierney, Jason P.; White, Andrew J. P.; Williams, David J.; Williamson, Christopher  
CS Department of Chemistry, Imperial College of Science, Technology and Medicine, London, SW7 2AY, UK  
SO Tetrahedron (1999), 55(52), 15025-15044  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
RE.CNT 17

RE

- (1) Brown, D; Tetrahedron 1991, V47, P1329 CAPLUS
- (2) Burke, S; Tetrahedron Lett 1991, V32, P3957 CAPLUS
- (3) Cox, P; J Chem Soc Perkin Trans 1 1990, P3151 CAPLUS
- (4) Craig, D; J Chem Soc, Chem Commun 1993, P901 CAPLUS
- (5) Craig, D; Tetrahedron Lett 1992, V33, P663 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 132:151777 CASREACT  
TI Synthesis and reactivity of 1,2,4-triazolo[1,5-c]quinazolines  
AU Pfeiffer, Wolf-Diethard; Hetzheim, Annemarie; Pazdera, Pavel; Bodtke, Anja; Mucke, Jana  
CS Institut fur Chemie und Biochemie, Ernst-Moritz-Arndt Universitat Greifswald, Greifswald, D-17487, Germany  
SO J. Heterocycl. Chem. (1999), 36(5), 1327-1336  
CODEN: JHTCAD; ISSN: 0022-152X  
PB HeteroCorporation  
DT Journal  
LA English  
RE.CNT 30

RE

- (1) Ammar, Y; Orient J Chem 1990, V6, P165 CAPLUS
- (2) Cherbuliez, E; Helv Chim Acta 1967, V50, P2563 CAPLUS
- (3) Cianci, C; Antiviral Chem Chemother 1996, V7, P353 CAPLUS
- (4) Cockerill, G; WO 9703069 1997 CAPLUS
- (5) Francis, J; J Med Chem 1991, V34, P281 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

V. Balasubramanian

Applicants  
✓

L4 ANSWER 13 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 132:78575 CASREACT  
TI Procedure for the production of 2-amino-4-chloro-1,3,5-triazines  
IN Zindel, Juergen; Hollander, Jens; Minn, Klemens; Willms, Lothar  
PA Hoechst Schering Agrevo G.m.b.H., Germany  
SO Ger. Offen., 20 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19830902	A1	20000113	DE 1998-19830902	19980710
	WO 2000002868	A1	20000120	WO 1999-EP4581	19990702
	W:		AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
	AU 9949048	A1	20000201	AU 1999-49048	19990702
	BR 9911975	A	20010327	BR 1999-11975	19990702
	EP 1097146	A1	20010509	EP 1999-932785	19990702
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI		
PRAI	DE 1998-19830902		19980710		
	WO 1999-EP4581		19990702		
OS	MARPAT 132:78575				

L4 ANSWER 14 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 131:351272 CASREACT  
TI A facile synthetic approach to imidazolidinone biocides  
AU Elrod, D. B.; Worley, S. D.  
CS Department of Chemistry, Auburn University, Auburn, AL, 36849, USA  
SO Ind. Eng. Chem. Res. (1999), 38(11), 4144-4149  
CODEN: IECRED; ISSN: 0888-5885  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 10  
RE  
(2) Asinger, F; Monatsh Chem 1967, V98, P1843 CAPLUS  
(3) Asinger, F; Monatsh Chem 1967, V98, P338 CAPLUS  
(5) Christian, J; J Org Chem 1957, V22, P396 CAPLUS  
(9) Worley, S; CRC Crit Rev Environ Control 1988, V18, P133 CAPLUS  
(10) Worley, S; Trends Polym Sci 1996, V4, P364 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 131:129975 CASREACT  
TI 1,3,5-Triazine-2,4,6-trisulfenyl trichloride. Synthesis, properties, and

V. Balasubramanian

reactions

AU Tripolt, Robert; Schmuck, Siegfried; Nachbaur, Edgar  
CS Institut Anorganische Chemie, Karl-Franzens-Univ., Graz, A-8010, Austria  
SO ~~Z. Naturforsch., B: Chem. Sci. (1999), 54(5), 609-616~~

CODEN: ZNBSEN; ISSN: 0932-0776

PB Verlag der Zeitschrift fuer Naturforschung

DT Journal

LA German

RE.CNT 29

RE

- (1) Angus, A; J Chem Soc 1958, P774 CAPLUS  
(2) Bacon, R; J Chem Soc 1960, P318 CAPLUS  
(3) Berenbaum, M; US 3128271 1964 CAPLUS  
(4) Block, E; J Am Chem Soc 1972, V94, P642 CAPLUS  
(5) Davis, F; J Am Chem Soc 1980, V102, P7967 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 131:87801 CASREACT

TI Preparation and fungitoxicity of some dichloro-8-quinolinols

AU Gershon, Herman; Clarke, Donald D.; Gershon, Muriel

CS Department Chemistry, Fordham Univ., New York, NY, 10458, USA

SO Monatsh. Chem. (1999), 130(5), 653-659

CODEN: MOCMB7; ISSN: 0026-9247

PB Springer-Verlag Wien

DT Journal

LA English

RE.CNT 13

RE

- (2) Gershon, H; Can J Microbiol 1981, V27, P612 CAPLUS  
(3) Gershon, H; Can J Microbiol 1985, V31, P707 CAPLUS  
(4) Gershon, H; J Pharm Sci 1989, V78, P975 CAPLUS  
(5) Gershon, H; J Pharm Sci 1991, V80, P542 CAPLUS  
(6) Gershon, H; Monatsh Chem 1991, V122, P935 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 130:311755 CASREACT

TI Utilities of 4-(4'-Benzylphenyl)-6-arylpyrimidine-2-thiones for the synthesis of biologically active condensed and non-condensed heterocycles

AU Amine, M. S.

CS Chemistry Department, Faculty of Science, Zagazig University, Benha, Egypt

SO Egypt. J. Chem. (1998), 41(1-6), 267-276

CODEN: EGJCA3; ISSN: 0367-0422

PB National Information and Documentation Centre

DT Journal

LA English

RE.CNT 18

RE

- (1) Albright, J; J Med Chem 1981, V24, P592 CAPLUS  
(2) Anon; 1977 CAPLUS  
(3) Anon; 1980 CAPLUS  
(4) Anon; 1982 CAPLUS

V. Balasubramanian

(8) El-Hashash, M; J Serb Chem Soc 1992, V57(9), P563 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 130:153785 CASREACT  
TI Resolution of cycloplatinated ferrocenylketimines  
AU Wu, Yang-Jie; Ding, Li; Wang, Wen-Ling; Du, Chen-Xia  
CS Department of Chemistry, Zhengzhou University, Zhengzhou, 450052, Peop.  
Rep. China  
SO Tetrahedron: Asymmetry (1998), 9(22), 4035-4041  
CODEN: TASYE3; ISSN: 0957-4166  
PB Elsevier Science Ltd.  
DT Journal  
LA English  
RE.CNT 10  
RE  
(1) Hamilton, W; Acta Cryst 1965, V18, P502 CAPLUS  
(2) Komatsu, T; Bull Chem Soc Jpn 1981, V54, P186 CAPLUS  
(3) Lopez, C; Tetrahedron:Asymmetry 1996, V7, P2527 CAPLUS  
(6) Sokolov, V; J Organomet Chem 1979, V182, P537 CAPLUS  
(9) Wu, Y; J Organomet Chem 1997, V535, P49 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 130:153779 CASREACT  
TI Insertion of Elemental Sulfur and SO2 into the Metal-Hydride and  
Metal-Carbon Bonds of Platinum Compounds  
AU Morton, Michael S.; Lachicotte, Rene J.; Vicic, David A.; Jones, William  
D.  
CS Department of Chemistry, University of Rochester, Rochester, NY, 14627,  
USA  
SO Organometallics (1999), 18(2), 227-234  
CODEN: ORGND7; ISSN: 0276-7333  
PB American Chemical Society  
DT Journal  
LA English  
RE.CNT 30  
RE  
(1) Abel, E; Polyhedron 1987, V6, P1261 CAPLUS  
(2) Arndtsen, B; Acc Chem Res 1995, V28, P154 CAPLUS  
(3) Bancroft, D; Inorg Chem 1986, V25, P763 CAPLUS  
(5) Bird, P; Can J Chem 1982, V60, P2075 CAPLUS  
(7) Briant, C; J Organomet Chem 1980, V202 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 129:343422 CASREACT  
TI Preparation of 2-halogeno-5-cyanopyridines and their intermediate  
dicyanothiobispyridine  
IN Hamazaki, Kakashi; Asanuma, Itsuo; Inoue, Shinichi; Shiono, Manzo  
PA Kuraray Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF



V. Balasubramanian

DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 10287653	A2	19981027	JP 1997-89180	19970408
OS	MARPAT 129:343422				

L4 ANSWER 21 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 129:330673 CASREACT  
TI Stereoselective synthesis of cis-fused chlorinated bicyclic ethers via  
CAN-mediated ring-opening of cyclopropyl sulfides  
AU Takemoto, Yoshiji; Ibuka, Toshiro  
CS Graduate School Pharmaceutical Sciences, Kyoto University, Sakyo-ku,  
Kyoto, 606-8501, Japan  
SO Tetrahedron Lett. (1998), 39(41), 7545-7548  
CODEN: TELEAY; ISSN: 0040-4039  
PB Elsevier Science Ltd.  
DT Journal  
LA English

L4 ANSWER 22 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 129:202863 CASREACT  
TI Preparation of 2-chloro-4-aminomethylpyridines  
IN Asanuma, Goro; Inoue, Shinichi  
PA Kuraray Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 10231288	A2	19980902	JP 1997-37521	19970221
OS	MARPAT 129:202863				

L4 ANSWER 23 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 129:136162 CASREACT  
TI Preparation of thiazole derivatives.  
IN Pitterna, Thomas; Maienfisch, Peter; Wadsworth, David John; Gsell,  
Laurenz; Rapold, Thomas; Szczepanski, Henry  
PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft  
m.b.H.  
SO PCT Int. Appl., 29 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 9832747	A1	19980730	WO 1998-EP297	19980120
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,				

V. Balasubramanian

KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,  
 NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,  
 UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,  
 FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,  
 GA, GN, ML, MR, NE, SN, TD, TG  
 AU 9862929 A1 19980818 AU 1998-62929 19980120  
 EP 958286 A1 19991124 EP 1998-906880 19980120  
 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI  
 JP 2001508452 T2 20010626 JP 1998-531564 19980120  
 US 6265585 B1 20010724 US 1999-341716 19990715  
 PRAI CH 1997-134 19970122  
 WO 1998-EP297 19980120  
 OS MARPAT 129:136162

L4 ANSWER 24 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 129:109245 CASREACT  
 TI Synthesis and oxidative fragmentation of catharanthine analogs.  
 Comparison  
 to the fragmentation - coupling of catharanthine and vindoline  
 AU Sundberg, Richard J.; Hong, Jian; Smith, Stanton Q.; Sabat, Michal;  
 Tabakovic, Ibro  
 CS Department of Chemistry, University of Virginia, Charlottesville, VA,  
 22901, USA  
 SO Tetrahedron (1998), 54(23), 6259-6292  
 CODEN: TETRAB; ISSN: 0040-4020  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English

L4 ANSWER 25 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 129:95484 CASREACT  
 TI Preparation of thiazoles  
 IN Pitterna, Thomas; Szczepanski, Henry; Maienfisch, Peter; Huter, Ottmar  
 Franz; Rapold, Thomas; Senn, Marcel; Gobel, Thomas; O'Sullivan, Anthony  
 Cornelius; Seifert, Gottfried  
 PA Novartis A.-G., Switz.  
 SO PCT Int. Appl., 47 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9827074	A1	19980625	WO 1997-EP7087	19971217
	W:				
	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,				
	DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,				
	KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,				
	NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,				
	UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,				
	FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,				
	GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9857592	A1	19980715	AU 1998-57592	19971217

V. Balasubramanian

AU 727669 B2 20001221  
 EP 946531 A1 19991006 EP 1997-953841 19971217  
 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI  
 CN 1241182 A 20000112 CN 1997-180777 19971217  
 BR 9714066 A 20000509 BR 1997-14066 19971217  
 JP 2001506254 T2 20010515 JP 1998-527322 19971217  
 ZA 9711358 A 19980708 ZA 1997-11358 19971218  
 US 6121455 A 20000919 US 1999-331432 19990813  
 PRAI CH 1996-3124 19961219  
 WO 1997-EP7087 19971217  
 OS MARPAT 129:95484

L4 ANSWER 26 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 129:54322 CASREACT  
 TI An improved large-scale preparation of benzimidazole-2-sulfonic acids and 2-chlorobenzimidazoles  
 AU Hinkley, Jack M.; Porcari, Anthony R.; Walker, John A., II; Swayze, Eric E.; Townsend, Leroy B.  
 CS Department of Medicinal Chemistry, College of Pharmacy, University of Michigan, Ann Arbor, MI, 48109-1065, USA  
 SO Synth. Commun. (1998), 28(9), 1703-1712  
 CODEN: SYNCAV; ISSN: 0039-7911  
 PB Marcel Dekker, Inc.  
 DT Journal  
 LA English

L4 ANSWER 27 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 128:270544 CASREACT  
 TI Preparation of 5-cyano-2-sulfonylpyridines and 2-chloro-5-cyanopyridine  
 IN Hamasaki, Takashi; Kuwayama, Tomoya; Asanuma, Itsuro; Shiono, Manzou  
 PA Kuraray Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10087626	A2	19980407	JP 1996-238958	19960910
OS	MARPAT 128:270544				

L4 ANSWER 28 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 128:270543 CASREACT  
 TI Preparation of 2-chloro-5-(chloromethyl)pyridine  
 IN Terajima, Shiro; Kajiyashiki, Tsuyoshi; Hashimoto, Masaru  
 PA Sagami Chemical Research Center, Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----

V. Balasubramanian

PI JP 10087624 A2 19980407 JP 1996-241838 19960912  
OS MARPAT 128:270543

L4 ANSWER 29 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 128:230248 CASREACT  
TI Process for preparing halopyridine derivatives  
IN Kuwayama, Tomoya; Inoue, Shinichi; Asanuma, Goro; Shiono, Manzo  
PA Kuraray Co., Ltd., Japan; Kuwayama, Tomoya; Inoue, Shinichi; Asanuma, Goro; Shiono, Manzo  
SO PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811071	A1	19980319	WO 1997-JP3144	19970908
	W: US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
SE	EP 882713	A1	19981209	EP 1997-939206	19970908
	R: CH, DE, FR, GB, LI, IE				
	JP 10139760	A2	19980526	JP 1997-243965	19970909
	US 6118005	A	20000912	US 1998-68115	19980506
PRAI	JP 1996-238957		19960910		
	WO 1997-JP3144		19970908		
OS	MARPAT 128:230248				

L4 ANSWER 30 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 128:75240 CASREACT  
TI Improved methods for the synthesis of adenines and aminopurines having cyclic nucleotide phosphodiesterase inhibitory activity  
IN Chasin, Mark; Hofer, Peter; Cavalla, David  
PA Euro-Celtique, S.A., Luxembourg; Chasin, Mark; Hofer, Peter; Cavalla, David  
SO PCT Int. Appl., 27 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9746561	A1	19971211	WO 1997-US10960	19970606
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
✓	US 5864037	A	19990126	US 1996-659767	19960606
	CA 2257807	AA	19971211	CA 1997-2257807	19970606
	AU 9734100	A1	19980105	AU 1997-34100	19970606

V. Balasubramanian

AU 735198 B2 20010705  
EP 912575 A1 19990506 EP 1997-930217 19970606  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2000507599 T2 20000620 JP 1998-500943 19970606  
PRAI US 1996-659767 19960606  
WO 1997-US10960 19970606  
OS MARPAT 128:75240

L4 ANSWER 31 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 127:247957 CASREACT  
TI Preparation of novel derivatives of 3-bromo and 3,3-dibromo-4-oxo-1-  
azetidines for their use in antibacterial or antitumor therapy  
IN Lukic, Irena  
PA Pliva Farmaceutska, Kemijska, Prehrambena I Kozmeticka Industrija  
Dionicko  
Drustvo, Croatia  
SO Eur. Pat. Appl., 19 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 791580	A2	19970827	EP 1997-101644	19970203
	EP 791580	A3	19970903		
	R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, PT, SE				
	RO 114127	B1	19990129	RO 1994-1153	19940707
	CA 2196909	AA	19970807	CA 1997-2196909	19970205
	CN 1164531	A	19971112	CN 1997-103186	19970205
	JP 09227511	A2	19970902	JP 1997-23594	19970206
	US 5843939	A	19981201	US 1997-796708	19970206
PRAI	HR 1996-61		19960206		
	HR 1997-36		19970120		
OS	MARPAT 127:247957				

L4 ANSWER 32 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 127:121721 CASREACT  
TI Preparation of 2-chloro-5-chloromethylthiazole  
IN O'sullivan, Anthony Cornelius; Gsell, Laurenz; Naef, Rudolf; Senn,  
Marcel;  
Pitterna, Thomas; Wadsworth, David John  
PA Novartis Ag, Switz.; O'sullivan, Anthony Cornelius; Gsell, Laurenz; Naef,  
Rudolf; Senn, Marcel; Pitterna, Thomas; Wadsworth, David John  
SO PCT Int. Appl., 31 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9723469	A1	19970703	WO 1996-EP5564	19961212
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG,				

V. Balasubramanian

SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ,  
 TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
 MR, NE, SN, TD, TG  
 AU 9711935 A1 19970717 AU 1997-11935 19961212  
 EP 873327 A1 19981028 EP 1996-943098 19961212  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,  
 FI JP 2000502661 T2 20000307 JP 1997-523266 19961212  
 ZA 9610771 A 19970630 ZA 1996-10771 19961220  
 PRAI CH 1995-3636 19951221  
 WO 1996-EP5564 19961212

L4 ANSWER 33 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 127:121718 CASREACT  
 TI Preparation of 2-chloro-5-chloromethylthiazole.  
 IN Kraatz, Udo  
 PA Bayer A.-G., Germany  
 SO Eur. Pat. Appl., 4 pp.  
 CODEN: EPXXDW

DT Patent  
 LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 780384	A2	19970625	EP 1996-119776	19961210
	EP 780384	A3	19970709		
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
	DE 19548417	A1	19970626	DE 1995-19548417	19951222
	US 5679796	A	19971021	US 1996-764952	19961213
	JP 09176140	A2	19970708	JP 1996-353342	19961217
	CN 1157284	A	19970820	CN 1996-117934	19961220
PRAI	DE 1995-19548417		19951222		

L4 ANSWER 34 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 127:108926 CASREACT  
 TI Preparation of 2-chlorothiazoles  
 IN Szczepanski, Henry; Gobel, Thomas; Huter, Ottmar Franz; O'Sullivan, Anthony Cornelius; Senn, Marcel; Rapold, Thomas; Maienfisch, Peter; Pitterna, Thomas  
 PA Novartis Ag, Switz.; Szczepanski, Henry; Gobel, Thomas; Huter, Ottmar Franz; O'Sullivan, Anthony Cornelius; Senn, Marcel; Rapold, Thomas; Maienfisch, Peter; Pitterna, Thomas  
 SO PCT Int. Appl., 116 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9720829	A1	19970612	WO 1996-IB1329	19961202
	W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG,				

V. Balasubramanian

SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ,  
 TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
 MR, NE, SN, TD, TG  
 ZA 9610046 A 19970710 ZA 1996-10046 19961129  
 AU 9676368 A1 19970627 AU 1996-76368 19961202  
 EP 873326 A1 19981028 EP 1996-939236 19961202  
 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE, FI  
 CN 1203593 A 19981230 CN 1996-198745 19961202  
 BR 9611666 A 19990223 BR 1996-11666 19961202  
 JP 2000501413 T2 20000208 JP 1997-521116 19961202  
 US 6211381 B1 20010403 US 1998-77569 19980601  
 PRAI CH 1995-3412 19951201  
 WO 1996-IB1329 19961202  
 OS MARPAT 127:108926

L4 ANSWER 35 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 126:343539 CASREACT  
 TI Condensed thiazoles. Part 1. Synthesis of 5,7-disubstituted  
 thiazolo[4,5-d]pyrimidines as possible anti-HIV, anticancer, and  
 antimicrobial agents  
 AU Habib, N. S.; Rida, S. M.; Badawey, E. A. M.; Fahmy, H. T. Y.  
 CS Faculty Pharmacy, University Alexandria, Alexandria, Egypt  
 SO Monatsh. Chem. (1996), 127(11), 1203-1207  
 CODEN: MOCMB7; ISSN: 0026-9247  
 PB Springer  
 DT Journal  
 LA English

L4 ANSWER 36 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 125:275662 CASREACT  
 TI Preparation of 2-chloropyridine compounds by free radical chlorination  
 IN Terashima, Shiro; Kato, Tadashi; Kajiyashiki, Tsuyoshi  
 PA Sagami Chemical Research Center, Japan  
 SO PCT Int. Appl., 26 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9626188	A1	19960829	WO 1996-JP383	19960221
	W: CA, CN, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	JP 09118666	A2	19970506	JP 1996-33216	19960221
PRAI	JP 1995-33208		19950222		
	JP 1995-33209		19950222		
	JP 1995-196603		19950801		
	JP 1995-196604		19950801		
	JP 1995-216067		19950824		
	JP 1995-216068		19950824		
OS	MARPAT 125:275662				

V. Balasubramanian

L4 ANSWER 37 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 125:195239 CASREACT  
TI Studies on the reactivity of cephalosporins. Ozonolysis of  
.DELTA.2-cephem  
derivatives as a new entry to highly functionalized 2-oxoazetidine and  
2-oxoazetidine-4-sulfenic acid derivatives  
AU Botta, Maurizio; Crucianelli, Marcello; Saladino, Raffaele; Mozzetti,  
Cristina; Nicoletti, Rosario  
CS Dipartimento Farmaco Chimico Tecnologico, Univ. de Siena, Siena, 53100,  
Italy  
SO Tetrahedron (1996), 52(30), 10205-10214  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

L4 ANSWER 38 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 124:289222 CASREACT  
TI Azinyl sulfides. XXXVI. Oligomers with four 3,4-quinolinediyl units and  
.alpha.,.omega.-bis(4-chloro-3-quinolinylthio)alkanes  
AU Boryczka, Stanislaw; Rudnik, Magdalena; Maslankiewicz, Andrzej  
CS Chair of Organic Chemistry, Silesian School of Medicine, Sosnowiec,  
41-200, Pol.  
SO J. Heterocycl. Chem. (1996), 33(1), 145-9  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 39 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 124:145678 CASREACT  
TI Novel synthetic approach to carbapenems utilizing aza-Cope Mannich  
cyclization  
AU Sakurai, Osamu; Horikawa, Hiroshi; Iwasaki, Tameo  
CS Lead Generation Research Laboratory, Tanabe Seiyaku Co., Ltd., Osaka,  
532,  
Japan  
SO J. Chem. Soc., Chem. Commun. (1995), (24), 2527-8  
CODEN: JCCCAT; ISSN: 0022-4936  
DT Journal  
LA English

L4 ANSWER 40 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 122:133134 CASREACT  
TI Synthetic routes to the carcinogen IQ and related 3H-imidazo[4,5-  
f]quinolines  
AU Ronne, Erik; Grivas, Spiros; Olsson, Kjell  
CS Dep. Chem., Swedish Univ. Agric. Sci., Uppsala, S-750 07, Swed.  
SO Acta Chem. Scand. (1994), 48(10), 823-30  
CODEN: ACHSE7; ISSN: 0904-213X  
DT Journal  
LA English



V. Balasubramanian

L4 ANSWER 41 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 122:106227 CASREACT  
TI Total synthesis of a frog poison, (.+-.)-epibatidine, a potent non-opioid analgesic  
AU Okabe, Kazuaki; Natsume, Mitsutaka  
CS Res. Foundation Itsuu Lab., Tokyo, 158, Japan  
SO Chem. Pharm. Bull. (1994), 42(7), 1432-6  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 42 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 122:10046 CASREACT  
TI Process for the preparation of 2-chlorobenzothiazoles and 2-chlorobenzoxazoles  
IN Kaess, Volker  
PA Bayer A.-G., Germany  
SO Ger. Offen., 6 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4313748	A1	19941103	DE 1993-4313748	19930427
	EP 626379	A2	19941130	EP 1994-105776	19940414
	EP 626379	B1	20010321		
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
	ES 2156131	T3	20010616	ES 1994-105776	19940414
	US 5502201	A	19960326	US 1994-230177	19940420
	JP 06321923	A2	19941122	JP 1994-105000	19940421
PRAI	DE 1993-4313748		19930427		
	DE 1993-4313750		19930427		
OS	MARPAT 122:10046				

L4 ANSWER 43 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 122:10045 CASREACT  
TI Process for the preparation of 2-chlorobenzothiazoles or 2-chlorobenzoxazoles from disulfides  
IN Kaess, Volker  
PA Bayer A.-G., Germany  
SO Ger. Offen., 6 pp.  
CODEN: GWXXBX  
DT Patent  
LA German  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4313749	A1	19941103	DE 1993-4313749	19930427
OS	MARPAT 122:10045				

L4 ANSWER 44 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 121:179941 CASREACT

V. Balasubramanian

TI Synthesis of epibatidine  
AU Sestanj, Kazimir; Melenski, Edward; Jirkovsky, Ivo  
CS Wyeth-Ayerst Res., Princeton, NJ, 08540, USA  
SO Tetrahedron Lett. (1994), 35(30), 5417-20  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 45 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 121:57486 CASREACT  
TI Reactions of 4-mercaptopyrimidine derivatives with 2-[(2-aminoethyl)amino]ethanol. Synthesis of the novel pyrimidotriazocine system  
AU Dlugosz, Anna  
CS Dep. Org. Chem., Sch. Med., Wroclaw, 50137, Pol.  
SO Acta Pol. Pharm. (1993), 50(2-3), 253-7  
CODEN: APPHAX; ISSN: 0001-6837  
DT Journal  
LA Polish

L4 ANSWER 46 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 121:57279 CASREACT  
TI A new reaction of .alpha.-chloro-.alpha.-chlorosulphenyl ketones: facile syntheses of 3,3-dichloro- and 3-chlorochroman-4-ones and thiochroman-4-ones  
AU Gabbutt, Christopher D.; Hepworth, John D.; Heron, B. Mark  
CS Dep. Chem., Univ. Cent. Lancashire, Preston, PR1 2HE, UK  
SO Tetrahedron (1994), 50(17), 5245-54  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

L4 ANSWER 47 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 121:35520 CASREACT  
TI Cyclization of products of cyanomethylenetriphenylphosphorane addition to acyl isothiocyanates. Convenient approach to the synthesis of pyrimidine functional derivatives  
AU Smolii, O. B.; Panchishin, S. Ya.; Drach, B. S.  
CS Inst. Bioorg. Khim. Neftekhim., Kiev, Russia  
SO Zh. Obshch. Khim. (1993), 63(9), 1990-4  
CODEN: ZOKHA4; ISSN: 0044-460X  
DT Journal  
LA Russian

L4 ANSWER 48 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 119:203354 CASREACT  
TI Synthesis and chemical transformations of 1,3-diaryltetrazolium salts. Preparation of mercury(II) and palladium(II) complexes of 1,3-diaryltetrazolyene and reactions of 5-substituted 1,3-diphenyltetrazolium salts with nucleophiles  
AU Araki, Shuki; Wanibe, Yasumi; Uno, Fujio; Morikawa, Akinao; Yamamoto, Kaori; Chiba, Kyoko; Butsugan, Yasuo

V. Balasubramanian

CS Dep. Appl. Chem., Nagoya Inst. Technol., Nagoya, 466, Japan  
SO Chem. Ber. (1993), 126(5), 1149-55  
CODEN: CHBEAM; ISSN: 0009-2940  
DT Journal  
LA English

L4 ANSWER 49 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 119:72899 CASREACT  
TI Industrial synthesis in the ellipticine series. II. Elaboration of a new method to access 6H-pyrido[4,3-b]carbazoles and analogs. B. Obtainment of tetracyclic structures  
AU Dormoy, Jean Robert; Heymes, Alain  
CS Dep. Rech. Dev. Chim., SANOFI Chim., Sisteron, 04201, Fr.  
SO Tetrahedron (1993), 49(14), 2915-38  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA French

L4 ANSWER 50 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 118:254812 CASREACT  
TI Reaction of (cyano)thioacetamide with arylhydrazones of .beta.-diketones: novel synthesis of 2(1H)-pyridinethiones, thieno[2,3-b]pyridines, and pyrazolo[3,4-b]pyridines  
AU Elgemeie, Galal Eldin Hamza; El-Zanate, Ali Mahmoud; Mansour, Abdel Kader E.  
CS Chem. Dep., Fac. Sci., Bani Suef, Egypt  
SO Bull. Chem. Soc. Jpn. (1993), 66(2), 555-61  
CODEN: BCSJA8; ISSN: 0009-2673  
DT Journal  
LA English

L4 ANSWER 51 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 118:22454 CASREACT  
TI Total synthesis of montanine-type Amaryllidaceae alkaloids, which possess a 5,11-methanomorphanthridine ring system, through cyclization with sodium bis(2-methoxyethoxy)aluminum hydride (SMEAH): the first stereoselective total syntheses of (.+-.)-montanine, (.+-.)-coccinine, (.+-.)-O-acetylmontanine, (.+-.)-pancracine, and (.+-.)-brunsvigine  
AU Ishizaki, Miyuki; Hoshino, Osamu; Iitaka, Yoichi  
CS Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan  
SO J. Org. Chem. (1992), 57(26), 7285-95  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 52 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 117:251359 CASREACT  
TI Preparation of 2-chloro-5-methylthio-1,3,4-thiadiazole from 2-mercapto-5-methylthio-1,3,4-thiadiazole and phosgene  
IN Diehr, Hans Joachim; Hammen, Guenter  
PA Bayer A.-G., Germany

V. Balasubramanian

SO Ger. Offen., 4 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 4109673	A1	19920924	DE 1991-4109673	19910323
	EP 505818	A1	19920930	EP 1992-104041	19920310
	R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
	JP 05132474	A2	19930528	JP 1992-91544	19920318
PRAI	DE 1991-4109673		19910323		

L4 ANSWER 53 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 117:48521 CASREACT

TI The reaction of 4-mercaptopyrimidines with 2-(2'-aminoethylamino)ethanol: synthesis of new ring system pyrimidotriazocine

AU Dlugosz, A.

CS Fac. Pharm., Med. Univ., Wroclaw, Pol.

SO Pharmazie (1992), 47(3), 186-8

CODEN: PHARAT; ISSN: 0031-7144

DT Journal

LA English

L4 ANSWER 54 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 116:106558 CASREACT

TI A first total synthesis of montanine-type amaryllidaceae alkaloids, (.+-.)-coccinine, (.+-.)-montanine, and (.+-.)-pancracine

AU Ishizaki, Miyuki; Hoshino, Osamu; Iitaka, Yoichi

CS Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan

SO Tetrahedron Lett. (1991), 32(48), 7079-82

CODEN: TELEAY; ISSN: 0040-4039

DT Journal

LA English

L4 ANSWER 55 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 114:228864 CASREACT

TI Synthesis and biological activity of some 4-substituted pyrimidines and fused pyrimidines

AU El-Bahaie, S.; El-Deeb, A.; Assy, M. C.

CS Fac. Sci., Zagazig Univ., Zagazig, Egypt

SO Pharmazie (1991), 46(1), 26-8

CODEN: PHARAT; ISSN: 0031-7144

DT Journal

LA English

L4 ANSWER 56 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 113:191285 CASREACT

TI Synthesis of pyrimido[4,5-d]pyrimidine, thieno[2,3-d]pyrimidines and 4-substituted pyrimidines

AU El-Bahaie, S.; Assy, M. G.; Heikal, A. F.

CS Fac. Sci., Zagazig Univ., Zagazig, Egypt

V. Balasubramanian

SO J. Indian Chem. Soc. (1990), 67(4), 327-9  
CODEN: JICSAH; ISSN: 0019-4522  
DT Journal  
LA English

L4 ANSWER 57 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 113:152359 CASREACT  
TI Novel 4-substituted 2-piperazinylquinazolines as potent anticonvulsive  
and antihypoxic agents  
AU Hori, Manabu; Iemura, Ryuichi; Hara, Hideaki; Ozaki, Akio; Sukamoto,  
Takayuki; Ohtaka, Hiroshi  
CS Pharm. Res. Cent., Kanebo Ltd., Osaka, 534, Japan  
SO Chem. Pharm. Bull. (1990), 38(5), 1286-91  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 58 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 113:115229 CASREACT  
TI Novel 4-phenoxy-2-(1-piperazinyl)quinazolines as potent anticonvulsive  
and antihypoxic agents  
AU Hori, Manabu; Iemura, Ryuichi; Hara, Hideaki; Ozaki, Akio; Sukamoto,  
Takayuki; Ohtaka, Hiroshi  
CS Pharm. Res. Cent., Kanebo Ltd., Osaka, 534, Japan  
SO Chem. Pharm. Bull. (1990), 38(3), 681-7  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 59 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 113:23839 CASREACT  
TI The chemistry of pyrimidinethiols. III. The synthesis of some  
substituted pyrimidinethiols and some thiazolo[5,4-d]pyrimidines  
AU Harnden, Michael R.; Hurst, Derek T.  
CS Biosci. Res. Cent., Beecham Pharm. Res. Div., Great Burgh/Epsom/Surrey,  
KT18 5XQ, UK  
SO Aust. J. Chem. (1990), 43(1), 55-62  
CODEN: AJCHAS; ISSN: 0004-9425  
DT Journal  
LA English

L4 ANSWER 60 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 113:23838 CASREACT  
TI The synthesis and chlorination of some pyrimidin-4-ols having 5-nitrogen  
functionality  
AU Harnden, Michael R.; Hurst, Derek T.  
CS Biosci. Res. Cent., Beecham Pharm. Res. Div., Great Burgh/Epsom/Surrey,  
KT18 5XQ, UK  
SO Aust. J. Chem. (1990), 43(1), 47-53  
CODEN: AJCHAS; ISSN: 0004-9425

V. Balasubramanian

DT Journal  
LA English

L4 ANSWER 61 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 113:6267 CASREACT  
TI Bioisosteric transformation of H1-antihistaminic benzimidazole derivatives  
AU Iemura, Ryuichi; Hori, Manabu; Saito, Tadayuki; Ohtaka, Hiroshi  
CS Pharm. Res. Cent., Kanebo Ltd., Osaka, 534, Japan  
SO Chem. Pharm. Bull. (1989), 37(10), 2723-6  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 62 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:216887 CASREACT  
TI A novel synthesis of pyrimidobenzodiazepines  
AU Dlugosz, Anna  
CS Sch. Med., Fac. Pharm., Wroclaw, 50-137, Pol.  
SO Arch. Pharm. (Weinheim, Ger.) (1990), 323(1), 59-60  
CODEN: ARPMAS; ISSN: 0365-6233  
DT Journal  
LA English

L4 ANSWER 63 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:216810 CASREACT  
TI Anti-trypanosomal compounds. Part II. Novel amidinium sulfinic compounds and phosphorylated heterocycles as anti-trypanosomal agents  
AU Willson, Michele; Zine, Kamel; Klaebe, Alain; Perie, Jean Jacques; Baltz, Theo  
CS Groupe Chim. Org. Biol., Univ. Paul-Sabatier, Toulouse, 31062, Fr.  
SO Eur. J. Med. Chem. (1989), 24(6), 623-5  
CODEN: EJMCA5; ISSN: 0223-5234  
DT Journal  
LA English

L4 ANSWER 64 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:216510 CASREACT  
TI Base-promoted ring-opening and elimination of 4-chloro- and 4-(methylthio)azetidinones  
AU Rao, S. Nagaraja; O'Ferrall, R. A. More  
CS Dep. Chem., Univ. Coll., Belfield/Dublin, Ire.  
SO J. Org. Chem. (1990), 55(10), 3244-51  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 65 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:178920 CASREACT  
TI Regioselective electrophilic additions to 2-oxygenated

V. Balasubramanian

7-oxabicyclo[2.2.1]hept-5-enes: a simple entry into the  
4,7-dioxatricyclo[3.2.1.0<sup>3,6</sup>]octane skeleton  
AU Arjona, Odon; Fernandez de la Pradilla, Roberto; Plumet, Joaquin; Viso, Alma  
CS Fac. Quim., Univ. Complutense, Madrid, 28040, Spain  
SO Tetrahedron (1989), 45(14), 4565-78  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

L4 ANSWER 66 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:158624 CASREACT  
TI Synthesis and reactivity of (pentamethylcyclopentadienyl)iridium  
bis(thiolate) and thiolate hydride complexes  
AU Klein, Darryl P.; Kloster, Grant M.; Bergman, Robert G.  
CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA  
SO J. Am. Chem. Soc. (1990), 112(5), 2022-4  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

L4 ANSWER 67 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:118505 CASREACT  
TI Benzimidazolyl derivatives of penicillin and cephalosporin: synthesis  
and  
antimicrobial activity  
AU Kotovskaya, S. K.; Mokrushina, G. A.; Suetina, T. A.; Chupakhin, O. N.;  
Zinchenko, E. Ya.; Lesovaya, Z. I.; Mezentsev, A. S.; Chernyshov, A. I.;  
Samoilova, L. N.  
CS Ural. Politekh. Inst., Sverdlovsk, USSR  
SO Khim.-Farm. Zh. (1989), 23(8), 952-6  
CODEN: KHFZAN; ISSN: 0023-1134  
DT Journal  
LA Russian

L4 ANSWER 68 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:118500 CASREACT  
TI Synthesis and biological evaluation of 3-chloro-1-carbacephem compounds  
AU Matsukuma, Ikuo; Yoshiye, Shigeo; Mochida, Kenichi; Hashimoto, Yukio;  
Sato, Kiyoshi; Okachi, Ryo; Hirata, Tadashi  
CS Tokyo Res. Lab., Kyowa Hakko Kogyo Co., Ltd., Machida, 194, Japan  
SO Chem. Pharm. Bull. (1989), 37(5), 1239-44  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 69 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:98354 CASREACT  
TI Potential neurotropic and antiinflammatory agents: 2-chloro-10,11-  
dihydrodibenzo[b,f]thiepin-10-yl sulfides  
AU Valenta, Vladimir; Vlkova, Marie; Protiva, Miroslav  
CS Res. Inst. Pharm. Biochem., Prague, 130 60, Czech.

V. Balasubramanian

SO Collect. Czech. Chem. Commun. (1989), 54(5), 1403-21  
CODEN: CCCCCK; ISSN: 0010-0765  
DT Journal  
LA English

L4 ANSWER 70 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:77123 CASREACT  
TI Preparation of some new derivatives of 5,6-diphenyl-1,2,4-triazine-3-hydrazines and their biological evaluation  
AU Misra, V. S.; Sen, Srirupa; Sen Gupta, A. K.; Abid Ali Khan, M. M.; Verma, H. N.  
CS Chem. Dep., Lucknow Univ., Lucknow, 226 007, India  
SO J. Indian Chem. Soc. (1989), 66(5), 322-4  
CODEN: JICSAH; ISSN: 0019-4522  
DT Journal  
LA English

L4 ANSWER 71 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:55767 CASREACT  
TI Studies on antiallergy agents. III. Synthesis of 2-anilino-1,6-dihydro-6-oxo-5-pyrimidinecarboxylic acids and related compounds  
AU Ozeki, Kohji; Ichikawa, Teru; Takehara, Hiroyuki; Tanimura, Kenjiro; Sato, Makoto; Yaginuma, Hideya  
CS Res. Lab., Morishita Pharm. Co., Ltd., Yasu, 520-23, Japan  
SO Chem. Pharm. Bull. (1989), 37(7), 1780-7  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 72 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:36149 CASREACT  
TI Synthetic routes to methylpalladium(II) and dimethylpalladium(II) chemistry and the synthesis of new nitrogen donor ligand systems  
AU Byers, Peter K.; Canty, Allan J.  
CS Chem. Dep., Univ. Tasmania, Hobart, 7001, Australia  
SO Organometallics (1990), 9(1), 210-20  
CODEN: ORGND7; ISSN: 0276-7333  
DT Journal  
LA English

L4 ANSWER 73 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 112:7660 CASREACT  
TI Synthesis and characterization of cyclopentadienyldicarbonyliron S-bonded monothiocarboxylates, FeCp(CO)2SCOR. Crystal structure of FeCp(CO)2SCO(2-NO2C6H4)  
AU El-Hinnawi, Mahmoud A.; Al-Ajlouni, Ahmad M.; AbuNasser, Jamilah S.; Powell, Anne K.; Vahrenkamp, H.  
CS Dep. Chem., Yarmouk Univ., Irbid, Jordan  
SO J. Organomet. Chem. (1989), 359(1), 79-86



V. Balasubramanian

CODEN: JORCAI; ISSN: 0022-328X  
DT Journal  
LA English

L4 ANSWER 74 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:214405 CASREACT  
TI Studies on the synthesis of the indolo[2,3-a]quinolizidine system  
AU Rubiralta, Mario; Diez, Anna; Bosch, Joan; Solans, Xavier  
CS Fac. Pharm., Univ. Barcelona, Barcelona, 08028, Spain  
SO J. Org. Chem. (1989), 54(23), 5591-7  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 75 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:134072 CASREACT  
TI Synthesis of 2,5'-bipyrimidines from substituted 5-cyanopyrimidines  
AU Mamaev, V. P.; Mikhaleva, M. A.; Shadrina, A. I.  
CS Novosib. Inst. Org. Khim., Novosibirsk, 63090, USSR  
SO Khim. Geterotsikl. Soedin. (1988), (3), 371-5  
CODEN: KGSSAQ; ISSN: 0453-8234  
DT Journal  
LA Russian

L4 ANSWER 76 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:115128 CASREACT  
TI Azolopyrimidines and pyrimidoquinazolines from 4-chloropyrimidines  
AU El-Reedy, A. M.; Ali, A. S.; Ayyad, A. O.  
CS Fac. Sci., Univ. Cairo, Giza, Egypt  
SO J. Heterocycl. Chem. (1989), 26(2), 313-16  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 77 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:57973 CASREACT  
TI Pentamethylcyclopentadienyl(dithiocarbamato)iron complexes with 17 to 19  
electrons. Preparation of Cp\*Fe(IV) complexes  
AU Desbois, Marie Helene; Astruc, Didier  
CS Lab. Chim. Org. Organometall., Univ. Bordeaux I, Talence, 33405, Fr.  
SO Angew. Chem. (1989), 101(4), 459-60  
CODEN: ANCEAD; ISSN: 0044-8249  
DT Journal  
LA German

L4 ANSWER 78 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:57670 CASREACT  
TI Synthesis and some reactions of 2-mercapto-3,5,7-triphenylpyrido[2,3-  
d]pyrimidine-4(3H)-one  
AU Hassan, Khairy M.; Youssef, Mohamed S. K.; El-Zohry, Maher F.; Abo  
El-Wafa, Raga

V. Balasubramanian

CS Fac. Sci., Univ. Assiut, Assiut, Egypt  
SO Phosphorus Sulfur Relat. Elem. (1988), 40(3-4), 237-41  
CODEN: PREEDF; ISSN: 0308-664X  
DT Journal  
LA English

L4 ANSWER 79 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:57664 CASREACT  
TI Synthesis of 6,7-dimethoxypyrimido[4,5-b]indoles as potential  
antihypertensive agents  
AU Venugopalan, B.; Desai, P. D.; De Souza, N. J.  
CS Res. Cent., Hoechst India Ltd., Bombay, 400 080, India  
SO J. Heterocycl. Chem. (1988), 25(6), 1633-9  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 80 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 111:23649 CASREACT  
TI The preparation of heterometallic molybdenum-mercury and  
molybdenum-copper  
complexes  
AU Roll, Joachim; Werner, Helmut  
CS Inst. Anorg. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Fed. Rep. Ger.  
SO Inorg. Chim. Acta (1988), 147(1), 93-7  
CODEN: ICHAA3; ISSN: 0020-1693  
DT Journal  
LA English

L4 ANSWER 81 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:213219 CASREACT  
TI Systematic chemical synthesis and NMR spectra of methyl  
.alpha.-glycosides  
of isomalto-oligosaccharides and related compounds  
AU Kovac, Pavol; Lerner, Laura  
CS Natl. Inst. Health, Bethesda, MD, 20892, USA  
SO Carbohydr. Res. (1988), 184, 87-112  
CODEN: CRBRAT; ISSN: 0008-6215  
DT Journal  
LA English

L4 ANSWER 82 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:154077 CASREACT  
TI The synthesis of 2-(alkylthio)- and 2-(arylthio)-3-cyanothiophenes. The  
nucleophilic displacement of the alkylsulfinyl group by thiols  
AU Luteijn, J. M.; Dolman, H.; Wals, H. C.  
CS Synth. Dep. Crop Protect., DUPHAR Res. Lab., Weesp, 1380 AA, Neth.  
SO Tetrahedron (1988), 44(18), 5921-8  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

V. Balasubramanian

L4 ANSWER 83 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:114515 CASREACT  
TI Assignment of absolute configuration for virantmycin and synthesis of its antipode  
AU Morimoto, Yoshiki; Oda, Kaoko; Shirahama, Haruhisa; Matsumoto, Takeshi; Omura, Satoshi  
CS Fac. Sci., Hokkaido Univ., Sapporo, 060, Japan  
SO Chem. Lett. (1988), (6), 909-12  
CODEN: CMLTAG; ISSN: 0366-7022  
DT Journal  
LA English

L4 ANSWER 84 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:75435 CASREACT  
TI Oxidation of thiols with 5-arylidene-1,3-dimethylbarbituric acid: application to synthesis of unsymmetrical disulfides  
AU Tanaka, Kiyoshi; Chen, Xing; Yoneda, Fumio  
CS Fac. Pharm. Sci., Kyoto Univ., Kyoto, 606, Japan  
SO Tetrahedron (1988), 44(11), 3241-9  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

L4 ANSWER 85 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:57814 CASREACT  
TI Synthesis and reactivity of the first structurally characterized heterobimetallic complex containing an unsupported bridging sulfur atom  
AU Kovacs, Julie A.; Bergman, Robert G.  
CS Dep. Chem., Univ. California, Berkeley, CA, 94720, USA  
SO J. Am. Chem. Soc. (1989), 111(3), 1131-3  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

L4 ANSWER 86 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 110:38946 CASREACT  
TI Studies on pyridazinone derivatives. XIII. Unusual displacement reaction of 5-(o-aminophenylthio)-4-chloro-2-methyl-3(2H)-pyridazinone with alkali  
AU Takaya, Masahiro  
CS Hamari Chem. Co., Ltd., Osaka, 533, Japan  
SO Yakugaku Zasshi (1988), 108(2), 136-41  
CODEN: YKKZAJ; ISSN: 0031-6903  
DT Journal  
LA Japanese

L4 ANSWER 87 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 109:231264 CASREACT  
TI Synthesis of cyclometalated (8-methoxynaphthyl)- and [8-(dimethylamino)naphthyl]platinum compounds and their reactivity toward electrophiles. X-ray molecular structures of square-planar

V. Balasubramanian

(8-methoxynaphthyl)platinum(II) chloride bis(diethyl sulfide) and bis(8-methoxynaphthyl)platinum(II) diethyl sulfide and octahedral fac-bis(8-methoxynaphthyl)methylplatinum(IV) iodide  
AU Wehman, Erik; Van Koten, Gerard; Knaap, Christopher T.; Ossor, Houssain; Pfeffer, Michel; Spek, Anthony L. X  
CS Anorg. Chem. Lab., Univ. Amsterdam, Amsterdam, Neth.  
SO Inorg. Chem. (1988), 27(24), 4409-17  
CODEN: INOCAJ; ISSN: 0020-1669  
DT Journal  
LA English

L4 ANSWER 88 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 109:230604 CASREACT  
TI Nuclear analogs of .beta.-lactam antibiotics. Synthesis of  
6,6-disubstituted acylaminopenems  
AU Banville, Jacques; Lapointe, Philippe; Belleau, Bernard; Menard, Marcel X  
CS Pharm. Res. Dev. Div., Bristol-Myers Co., Candiag, PQ, J5R 1J1, Can.  
SO Can. J. Chem. (1988), 66(6), 1390-9  
CODEN: CJCHAG; ISSN: 0008-4042  
DT Journal  
LA English

L4 ANSWER 89 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 109:210995 CASREACT  
TI Isocytosine H2-receptor histamine antagonists. I. Oxmetidine and related compounds F  
AU Brown, Thomas H.; Blakemore, Robert C.; Durant, Graham J.; Emmett, John C.; Ganellin, C. Robin; Parsons, Michael E.; Rawlings, D. Anthony; Walker, Terence F.  
CS Smith Kline and French Res. Ltd., Welwyn/Hertfordshire, AL6 9AR, UK  
SO Eur. J. Med. Chem. (1988), 23(1), 53-62  
CODEN: EJMCA5; ISSN: 0223-5234  
DT Journal  
LA English

L4 ANSWER 90 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 109:37974 CASREACT  
TI Rapid inversion versus stable chiral center formation. Different behavior  
of coordinated nitrogens in four- and five-coordinate platinum(II) complexes with N,N'-disubstituted ethylenediamines  
AU Fanizzi, Francesco P.; Maresca, Luciana; Natile, Giovanni; Lanfranchi, Maurizio; Manotti-Lanfredi, Anna M.; Tiripicchio, Antonio Z  
CS Dip. Farm.-Chim., Univ. Bari, Bari, 70126, Italy  
SO Inorg. Chem. (1988), 27(14), 2422-31  
CODEN: INOCAJ; ISSN: 0020-1669  
DT Journal  
LA English

L4 ANSWER 91 OF 199 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

AN 109:6470 CASREACT  
TI Oxidation of thiols by 5-arylidene-1,3-dimethylbarbituric acid and its application to the synthesis of unsymmetrical disulfides  
AU Tanaka, Kiyoshi; Chen, Xing; Kimura, Teiji; Yoneda, Fumio  
CS Fac. Pharm. Sci., Kyoto Univ., Kyoto, 606, Japan  
SO Tetrahedron Lett. (1987), 28(36), 4173-6  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 92 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 109:6265 CASREACT  
TI A novel synthesis of substituted 3-aminopenems  
AU Barker, A. J.; Teall, M. R.; Johnson, G.  
CS Dep. Synth. Chem., Hoechst Pharm. Res. Lab., Walton/Milton Keynes, MK7 7AJ, UK  
SO Tetrahedron Lett. (1987), 28(20), 2283-6  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 93 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:221547 CASREACT  
TI The regiospecific Pummerer-like introduction of chlorine atoms into pyrrol-3-yl and indol-3-yl sulfoxides  
AU Garcia, Josefina; Ortiz, Claudio; Greenhouse, Robert  
CS Div. Invest., SYNTEX, S.A., Mexico City, Mex.  
SO J. Org. Chem. (1988), 53(11), 2634-7  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 94 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:204570 CASREACT  
TI Structure-activity profile of a series of novel triazoloquinazoline adenosine antagonists  
AU Francis, John E.; Cash, William D.; Psychoyos, Stacy; Ghai, Geetha; Wenk, Paul; Friedmann, Robert C.; Atkins, Charlotte; Warren, Vivian; Furness, Patricia; et al.  
CS Pharm. Div., CIBA-GEIGY Corp., Summit, NJ, 07901, USA  
SO J. Med. Chem. (1988), 31(5), 1014-20  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English

L4 ANSWER 95 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:204377 CASREACT  
TI An improved, large-scale synthesis of xanthothricin and reumycin  
AU Black, T. Howard  
CS Dep. Chem., East. Illinois Univ., Charleston, IL, 61920, USA  
SO J. Heterocycl. Chem. (1987), 24(5), 1373-5  
CODEN: JHTCAD; ISSN: 0022-152X

V. Balasubramanian

DT Journal  
LA English

L4 ANSWER 96 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:167711 CASREACT  
TI N-(Benzenesulfonyl)indole as terminator in a biomimetic polyene  
cyclization: synthesis of a pentacyclic indolosesquiterpene  
AU Mirand, Catherine; Doe de Maindreville, Michele; Cartier, Dominique;  
Levy, Jean  
CS Fac. Pharm., Univ. Reims, Reims, F 51096, Fr.  
SO Tetrahedron Lett. (1987), 28(31), 3565-8  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 97 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:75050 CASREACT  
TI New reactions of 2-alkylthiopenems  
AU Girijavallabhan, Viyyoor M.; McCombie, Stuart W.; Pinto, Patrick; Lin,  
Sue  
Ing; Versace, Richard  
CS Schering Res., Bloomfield, NJ, 07003, USA  
SO J. Chem. Soc., Chem. Commun. (1987), (9), 691-2  
CODEN: JCCCAT; ISSN: 0022-4936  
DT Journal  
LA English

L4 ANSWER 98 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:55708 CASREACT  
TI The preparation of the first .alpha.-vinylidene-.beta.-lactams  
AU Buynak, John D.; Mathew, Jacob; Rao, M. Narayana; Haley, Elizabeth;  
George, Christian; Siriwardane, Upali  
CS Dep. Chem., South. Methodist Univ., Dallas, TX, 75275, USA  
SO J. Chem. Soc., Chem. Commun. (1987), (10), 735-7  
CODEN: JCCCAT; ISSN: 0022-4936  
DT Journal  
LA English

L4 ANSWER 99 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:21816 CASREACT  
TI Synthesis and hypoglycemic activity of 7,8-dihydro-6H-thiopyrano[3,2-  
d]pyrimidine derivatives and related compounds  
AU Ohno, Sachio; Mizukoshi, Kiyoshi; Komatsu, Osamu; Kuno, Yasuo; Nakamura,  
Yoshiki; Kato, Eiichi; Nagasaka, Mitsuaki  
CS Res. Lab., Maruko Seiyaku Co., Ltd., Kasugai, 486, Japan  
SO Chem. Pharm. Bull. (1986), 34(10), 4150-65  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

V. Balasubramanian

L4 ANSWER 100 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:21810 CASREACT  
TI The condensation products of 2,3,6-trisubstituted-1,4-naphthoquinones  
with 2-aminothiophenol  
AU Kang, W. B.; Nanya, Seiko; Yamaguchi, Yasushi; Maekawa, Eturo; Ueno,  
Yoshio  
CS Dep. Appl. Chem., Nagoya Inst. Technol., Nagoya, 466, Japan  
SO J. Heterocycl. Chem. (1987), 24(1), 91-4  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 101 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:6237 CASREACT  
TI A stereoselective synthesis of D-normorphinan derivatives by means of an  
intramolecular Diels-Alder reaction  
AU Kametani, Tetsuji; Suzuki, Yukio; Honda, Toshio  
CS Inst. Med. Chem., Hoshi Univ., Tokyo, 142, Japan  
SO Chem. Pharm. Bull. (1986), 34(12), 4971-7  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 102 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:5950 CASREACT  
TI Pyrimidines. 8. Chlorination of 6-methyluracil with phosphorus  
oxychloride  
in the presence of trialkylamines  
AU Gershon, Herman; Grefig, Anthony; Clarke, Donald D.  
CS Boyce Thompson Inst. Plant Res., Cornell Univ., Ithaca, NY, 14853, USA  
SO J. Heterocycl. Chem. (1987), 24(1), 205-9  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 103 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 108:5733 CASREACT  
TI Syntheses of chiral intermediates of 1-.beta.-methylcarbapenems:  
(3S,4R)-3-[1(R)-tert-butyldimethylsilyloxyethyl]-4-chloroazetidin-2-one  
and (3S,4S)-3-[1(R)-tert-butyldimethylsilyloxyethyl]-4-[1(R)-tert-  
butylthiocarbonyl]azetidin-2-one  
AU Endo, Masaki  
CS Pharm. Res. Dev. Div., Bristol-Myers Pharm., Candiatic, PQ, J5R 1J1, Can.  
SO Can. J. Chem. (1987), 65(9), 2140-5  
CODEN: CJCHAG; ISSN: 0008-4042  
DT Journal  
LA English

L4 ANSWER 104 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 107:217991 CASREACT  
TI A phosphorus-31 and proton NMR study of the conformations of a series of

V. Balasubramanian

diastereomeric 3-substituted trans-2,4-dioxo-3-oxo- and  
trans-2,4-dioxo-3-thioxo-3-phosphabicyclo[4.3.0]nonanes as model  
compounds

for cyclic nucleotides

AU Hermans, Rob J. M.; Buck, Henk M.  
CS Dep. Org. Chem., Eindhoven Univ. Technol., Eindhoven, NL-5600 MB, Neth.  
SO J. Org. Chem. (1987), 52(23), 5150-7  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 105 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 107:198824 CASREACT  
TI Studies on nucleosides. Part XIII. Synthesis and antiviral activity of  
acyclic analogs of spongiosine.  
AU Singh, P. K.; Saluja, Sunita; Pratap, Ram; George, C. X.; Bhakuni, D. S.  
CS Cent. Drug Res. Inst., Lucknow, 226 001, India  
SO Indian J. Chem., Sect. B (1986), 25B(8), 823-7  
CODEN: IJSBDB; ISSN: 0376-4699  
DT Journal  
LA English

L4 ANSWER 106 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 107:175796 CASREACT  
TI Chlorosulfonyl derivatives of maleic and chloromaleic anhydrides and some  
of their properties  
AU Gruzdev, V. G.; Gruzdev, G. V.  
CS Pedagog. Inst., Ulyanovsk, USSR  
SO Zh. Obshch. Khim. (1986), 56(8), 1872-6  
CODEN: ZOKHA4; ISSN: 0044-460X  
DT Journal  
LA Russian

L4 ANSWER 107 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 107:115554 CASREACT  
TI Organomanganese(II) reagents in the synthesis of 5-pyrimidinyl ketones  
AU Arukwe, Joseph; Undheim, Kjell  
CS Dep. Chem., Univ. Oslo, Oslo, N-0315/3, Norway  
SO Acta Chem. Scand., Ser. B (1986), B40(9), 764-7  
CODEN: ACBOCV; ISSN: 0302-4369  
DT Journal  
LA English

L4 ANSWER 108 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 107:96671 CASREACT  
TI Convenient synthesis of substituted 3-aminothiophene-2-carbonitriles from  
.alpha.-acetylenic nitriles and their conversion to thieno[3,2-  
d]pyrimidines  
AU Ren, Wu Yun; Rao, Kambhampati V. B.; Klein, Robert S.  
CS Grad. Sch. Med. Sci., Cornell Univ., New York, NY, 10021, USA  
SO J. Heterocycl. Chem. (1986), 23(6), 1757-63  
CODEN: JHTCAD; ISSN: 0022-152X



V. Balasubramanian

DT Journal  
LA English

L4 ANSWER 109 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:213516 CASREACT  
TI Subsite-specific functionalization of the [4Fe-4S]<sub>2</sub><sup>+</sup> analog of  
iron-sulfur  
protein clusters  
AU Stack, T. D. P.; Holm, R. H.  
CS Dep. Chem., Harvard Univ., Cambridge, MA, 02138, USA  
SO J. Am. Chem. Soc. (1987), 109(8), 2546-7  
CODEN: JACSAT; ISSN: 0002-7863  
DT Journal  
LA English

L4 ANSWER 110 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:196718 CASREACT  
TI The reaction of 9-(2',3'-dideoxy-.beta.-D-glycero-pent-2-  
enofuranosyl)adenine derivatives with arene- and alkanesulfonyl  
chlorides.  
An unusual ring opening reaction of thiiranium ions  
AU Welch, C. J.; Bazin, H.; Chattopadhyaya, J.  
CS Biomed. Cent., Uppsala Univ., Uppsala, S-751 23, Swed.  
SO Acta Chem. Scand., Ser. B (1986), B40(5), 343-57  
CODEN: ACBOCV; ISSN: 0302-4369  
DT Journal  
LA English

L4 ANSWER 111 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:196378 CASREACT  
TI Synthesis and chemical properties of  
3,4,5,6-tetrahydro-3-hydroxy-8-methyl-  
6-oxo-2H-pyrimido[2,1-b][1,3]thiazines  
AU Faskhutdinov, R. M.; Pashkurov, N. G.; Reznik, V. S.  
CS Inst. Org. Fiz. Khim., Moscow, USSR  
SO Izv. Akad. Nauk SSSR, Ser. Khim. (1986), (7), 1634-6  
CODEN: IASKA6; ISSN: 0002-3353  
DT Journal  
LA Russian

L4 ANSWER 112 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:196087 CASREACT  
TI 2-Selenacephems and 1-dethia-1-selenapenems  
AU Alpegiani, Marco; Bedeschi, Angelo; Perrone, Ettore; Franceschi, Giovanni  
CS Ric. Sviluppo Chim., Farmitalia Carlo Erba, Milan, Italy  
SO Tetrahedron Lett. (1986), 27(26), 3041-4  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 113 OF 199 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

AN 106:156415 CASREACT  
TI Linear expanded xanthenes  
AU Rodgers, Gary R.; Neish, William J. P.  
CS Dep. Pharmacol., Univ. Sheffield, Sheffield, S10 2TN, UK  
SO Monatsh. Chem. (1986), 117(6-7), 879-82  
CODEN: MOCMB7; ISSN: 0026-9247  
DT Journal  
LA English

X

L4 ANSWER 114 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:138324 CASREACT  
TI High-yielding syntheses of 4(5)-substituted imidazoles via organolithium intermediates. The utility of sulfonamide N-protection and silicon-containing blocking groups  
AU Carpenter, Andrew J.; Chadwick, Derek J.  
CS Dep. Org. Chem., Univ. Liverpool, Liverpool, L69 3BX, UK  
SO Tetrahedron (1986), 42(8), 2351-8  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

✓

L4 ANSWER 115 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:138321 CASREACT  
TI 4-Alkyl(aryl)-3,6-diaminopyrazolo[3,4-b]pyridines with chlorine or alkylthio substitution in the 5-position  
AU Pochat, Francis  
CS Lab. Synthèse Org., Univ. Rennes I, Rennes, F. 35042, Fr.  
SO Tetrahedron (1986), 42(16), 4461-9  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA French

X

L4 ANSWER 116 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:102180 CASREACT  
TI Sulfurization of azines. Part VII. Exhaustive sulfurization of quinoline  
AU Maslankiewicz, Andrzej  
CS Inst. Chem. Med. Phys., Silesian Sch. Med., Sosnowiec, 41200, Pol.  
SO Pol. J. Chem. (1985), 59(5-6), 511-20  
CODEN: PJCHDQ; ISSN: 0137-5083  
DT Journal  
LA English

X

L4 ANSWER 117 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:84377 CASREACT  
TI Base-induced skeletal rearrangements via spirocyclic ipso intermediates in dibenzodithiocinium salts  
AU Ohkata, Katsuo; Okada, Keiji; Maruyama, Kohji; Akiba, Kinya  
CS Fac. Sci., Hiroshima Univ., Hiroshima, 730, Japan  
SO Tetrahedron Lett. (1986), 27(28), 3257-60  
CODEN: TELEAY; ISSN: 0040-4039

+

V. Balasubramanian

DT Journal  
LA English

L4 ANSWER 118 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:67155 CASREACT  
TI 3,4-Dihydro-2-phenyl-2H-pyrano[2,3-b]pyridines. Novel aza analogs of flavans  
AU Bargar, T. M.; Wilson, T.; Daniel, J. K.  
CS Dep. Med. Chem., Merrell Dow Res. Inst., Indianapolis, IN, 46268, USA  
SO J. Heterocycl. Chem. (1985), 22(6), 1583-92  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 119 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:50527 CASREACT  
TI Methods for indole alkaloid synthesis: reactions of N-(arylsulfonyl)enamines with electrophiles. An expeditious synthesis of (.-.)-eburnamonine  
AU Magnus, Philip; Pappalardo, Paul; Southwell, Ian  
CS Dep. Chem., Indiana Univ., Bloomington, IN, 47405, USA  
SO Tetrahedron (1986), 42(12), 3215-22  
CODEN: TETRAB; ISSN: 0040-4020  
DT Journal  
LA English

L4 ANSWER 120 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:50122 CASREACT  
TI Preparation of pyridoazoloazepines from chloropyridoazepines  
AU Patel, Dalpat I.; Smalley, Robert K.; Scopes, David I. C.  
CS Ramage Lab., Univ. Salford, Salford, M5 4WT, UK  
SO J. Chem. Res., Synop. (1986), (6), 204-5  
CODEN: JRPSDC; ISSN: 0308-2342  
DT Journal  
LA English

L4 ANSWER 121 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:32148 CASREACT  
TI Nucleophilic substitution reactions in benzo[c][1,8]naphthyridines  
AU Deady, Leslie W.; Werden, Dianne M.  
CS Chem. Dep., La Trobe Univ., Bundoora, 3083, Australia  
SO Aust. J. Chem. (1986), 39(4), 667-75  
CODEN: AJCHAS; ISSN: 0004-9425  
DT Journal  
LA English

L4 ANSWER 122 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 106:18486 CASREACT  
TI Polycyclic N-hetero compounds. XXI. Synthesis of novel ring system, 4H-imidazo[1',2':1,6]pyrimido[5,4-d][1]benzazepine as B-homo-6,11,13,15-tetraazasteroidal analog

V. Balasubramanian

AU Hirota, Takashi; Fukumoto, Masami; Sasaki, Kenji; Namba, Tetsuto;  
Hayakawa, Shohei  
CS Fac. Pharm. Sci., Okayama Univ., Okayama, 700, Japan  
SO Heterocycles (1986), 24(1), 143-54  
CODEN: HTCYAM; ISSN: 0385-5414  
DT Journal  
LA English

L4 ANSWER 123 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 105:172392 CASREACT  
TI Heterocyclic amplifiers of phleomycin. IX. Some derivatives of fused and  
unfused mono- and diaza heterocycles  
AU Barlin, Gordon B.; Ireland, Stephen J.  
CS John Curtin Sch. Med. Res., Aust. Natl. Univ., Canberra, 2601, Australia  
SO Aust. J. Chem. (1985), 38(11), 1685-91  
CODEN: AJCHAS; ISSN: 0004-9425  
DT Journal  
LA English

L4 ANSWER 124 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 105:172213 CASREACT  
TI Reaction of N-halo imides with sulfur. Thiodiimides  
AU Borovikova, G. S.; Levchenko, E. S.; Kaminskaya, E. I.  
CS Inst. Org. Khim., Kiev, USSR  
SO Zh. Org. Khim. (1986), 22(1), 100-6  
CODEN: ZORKAE; ISSN: 0514-7492  
DT Journal  
LA Russian

L4 ANSWER 125 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 105:97205 CASREACT  
TI Synthesis of 3,3a-dihydro-2H,5H-azeto[2,1-b]benzo[d]-1,3-oxazine-2,5-  
diones. 2.  
AU Ongania, Karl Hans; Egerbacher, Josef  
CS Inst. Org. Pharm. Chem., Univ. Innsbruck, Innsbruck, A-6020, Austria  
SO Monatsh. Chem. (1985), 116(8-9), 979-94  
CODEN: MOCMB7; ISSN: 0026-9247  
DT Journal  
LA German

L4 ANSWER 126 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 105:43176 CASREACT  
TI Syntheses of 2,4-substituted homo-C-pyrimidine nucleosides  
AU Renz, Hans; Schlimme, Eckhard  
CS Lab. Biol. Chem., Univ.-GH Paderborn, Paderborn, D-4790, Fed. Rep. Ger.  
SO Liebigs Ann. Chem. (1986), (6), 957-66  
CODEN: LACHDL; ISSN: 0170-2041  
DT Journal  
LA German

L4 ANSWER 127 OF 199 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

AN 104:224754 CASREACT  
TI Synthetic studies of 1-azapenem  
AU Shibata, Tomoyuki; Sugimura, Yukio; Sato, Sadao; Kawazoe, Kayoko  
CS Chem. Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan  
SO Heterocycles (1985), 23(12), 3069-78  
CODEN: HTCYAM; ISSN: 0385-5414  
DT Journal  
LA English

L4 ANSWER 128 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:110015 CASREACT  
TI Application of a transition-metal-mediated stereospecific Michael  
reaction  
equivalent to the synthesis of alloxyhimbone  
AU Godleski, Stephen A.; Villhauer, Edwin B.  
CS Dep. Chem., Univ. Rochester, Rochester, NY, 14627, USA  
SO J. Org. Chem. (1986), 51(4), 486-91  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 129 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:110010 CASREACT  
TI A convenient synthesis of 3-acylindoles via Friedel Crafts acylation of  
1-(phenylsulfonyl)indole. A new route to pyridocarbazole-5,11-quinones  
and ellipticine  
AU Ketcha, Daniel M.; Gribble, Gordon W.  
CS Dep. Chem., Dartmouth Coll., Hanover, NH, 03755, USA  
SO J. Org. Chem. (1985), 50(26), 5451-7  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 130 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:109601 CASREACT  
TI Reaction of cycloaliphatic carbodiimides with oxalyl chloride  
AU Richter, R.; Barsa, E. A.  
CS North Haven Lab., Dow Chem. USA, North Haven, CT, 06473-0430, USA  
SO J. Org. Chem. (1986), 51(3), 417-19  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 131 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:109405 CASREACT  
TI (Perhalomethylthio)heterocycles. XXII. N-Functionalization of  
2,3,4,5-tetrakis(trifluoromethylthio)pyrrole  
AU Haas, Alois; Klare, Christiane  
CS Ruhr-Univ. Bochum, Bochum, D-4630/1, Fed. Rep. Ger.  
SO Chem. Ber. (1985), 118(11), 4588-96  
CODEN: CHBEAM; ISSN: 0009-2940  
DT Journal

V. Balasubramanian

LA German

L4 ANSWER 132 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:88482 CASREACT  
TI Benzazolylythiones in the reaction with thionyl chloride  
AU Mokrushina, G. A.; Kotovskaya, S. K.; Yurchenko, G. A.  
CS Ural. Politekh. Inst., Sverdlovsk, 620002, USSR  
SO Khim. Geterotsikl. Soedin. (1985), (8), 1047-50  
CODEN: KGSSAQ; ISSN: 0453-8234  
DT Journal  
LA Russian

L4 ANSWER 133 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:33920 CASREACT  
TI Approaches to the stereocontrolled synthesis of prostanoids with nitrogen in the ring. Part 2. Synthesis of an 11-aza-11-deoxyprostaglandin synthon from D-glucose and L-arabinose  
AU Holzapfel, Cedric W.; Jina, Arvind N.; Koekemoer, Johannes M.; Von Platen, Axel E.  
CS Dep. Chem., Rand Afr. Univ., Johannesburg, 2000, S. Afr.  
SO S. Afr. J. Chem. (1985), 38(2), 65-72  
CODEN: SAJCDG; ISSN: 0379-4350  
DT Journal  
LA English

L4 ANSWER 134 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 104:19434 CASREACT  
TI Model experiments on surugatoxin synthesis. III. Synthesis of 2,4-dibenzoyloxy-6-ethylsulfonyl-5-nitropyrimidine  
AU Hashizume, Kiyomatsu; Inoue, Shoji  
CS Fac. Pharm., Meijo Univ., Nagoya, 468, Japan  
SO Yakugaku Zasshi (1985), 105(4), 362-7  
CODEN: YKKZAJ; ISSN: 0031-6903  
DT Journal  
LA Japanese

L4 ANSWER 135 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:215105 CASREACT  
TI (Perhalomethylthio) heterocycles. XVIII. Synthesis and properties of halogenated (perhalomethylthio)pyrroles  
AU Ceacareanu, Dimitru M.; Gerstenberger, Michael R. C.; Haas, Alois  
CS Ruhr-Univ. Bochum, Bochum, D-4630, Fed. Rep. Ger.  
SO J. Heterocycl. Chem. (1985), 22(2), 281-5  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA German

L4 ANSWER 136 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:196023 CASREACT  
TI New antiallergic pyrano[3,2-g]quinoline-2,8-dicarboxylic acids with

V. Balasubramanian

potential for the topical treatment of asthma  
AU Cairns, Hugh; Cox, David; Gould, Ken J.; Ingall, Anthony H.; Suschitzky, John L.  
CS Res. Dev. Lab., Fisons PLC, Loughborough/Leicestershire, LE11 0RH, UK  
SO J. Med. Chem. (1985), 28(12), 1832-42  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English

L4 ANSWER 137 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:160789 CASREACT  
TI Synthesis and biological activity of certain 6-substituted and 2,6-disubstituted 2'-deoxytubercidins prepared via the stereospecific sodium salt glycosylation procedure  
AU Cottam, Howard B.; Kazimierczuk, Zygmunt; Geary, Stewart; McKernan, Patricia A.; Revankar, Ganapathi R.; Robins, Roland K.  
CS Cancer Res. Cent., Brigham Young Univ., Provo, UT, 84602, USA  
SO J. Med. Chem. (1985), 28(10), 1461-7  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English


L4 ANSWER 138 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:123584 CASREACT  
TI Stereospecific conversion of cyclic phosphorothioates into chlorophosphates  
AU Bouchu, D.; Tardy, F.; Moreau, M.; Dreux, J.; Skowronska, A.; Michalski, J.  
CS Lab. Synth. Org. Appl., Univ. Claude Bernard Lyon I, Villeurbanne, 69622, Fr.  
SO Tetrahedron Lett. (1985), 26(4), 443-6  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English

L4 ANSWER 139 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:123428 CASREACT  
TI Pyrimidine and fused pyrimidine derivatives. III. Synthesis of s-triazolo[1,5-a]pyrimidine derivatives by using ketene dithioacetals  
AU Tominaga, Yoshinori; Sakai, Shuichiro; Kohra, Shinya; Tsuka, Junko; Matsuda, Yoshiro; Kobayashi, Goro  
CS Fac. Pharm. Sci., Nagasaki Univ., Nagasaki, 852, Japan  
SO Chem. Pharm. Bull. (1985), 33(3), 962-70  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English


L4 ANSWER 140 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:87846 CASREACT  
TI Synthesis of 4-alkyl-3,5-diamino-1,2,4,6-thiatriazine 1,1-dioxides. Part II  
AU Cousins, Simon J.; Ross, Barry C.; Maw, Graham N.; Michael, Jeffrey D.

V. Balasubramanian


CS Hoechst Pharm. Res. Lab., Walton/Milton Keynes, UK  
SO Tetrahedron Lett. (1985), 26(8), 1105-8  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English




L4 ANSWER 141 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:87845 CASREACT  
TI 2(6)-Alkyl-3,5-diamino-1,2,4,6-thiatriazine 1,1-dioxides. Part I  
AU Michael, Jeffrey D.; Rees, Peter M.; Ross, Barry C.  
CS Hoechst Pharm. Res. Lab., Walton/Milton Keynes, UK  
SO Tetrahedron Lett. (1985), 26(8), 1101-4  
CODEN: TELEAY; ISSN: 0040-4039  
DT Journal  
LA English




L4 ANSWER 142 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 103:6092 CASREACT  
TI Synthesis of 3,4-benzo-1-oxacephem  
AU Ongania, Karl Hans  
CS Inst. Org. Pharm. Chem., Univ. Innsbruck, Innsbruck, A-6020, Austria  
SO Z. Naturforsch., B: Anorg. Chem., Org. Chem. (1985), 40B(1), 115-19  
CODEN: ZNBAD2; ISSN: 0340-5087  
DT Journal  
LA German



L4 ANSWER 143 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 102:113643 CASREACT  
TI Synthetic and reactivity studies on (C5H5)2Ti(.mu.-SH)2Mo(CO)4 and related compounds  
AU Ruffing, Charles J.; Rauchfuss, Thomas B.  
CS Sch. Chem. Sci., Univ. Illinois, Urbana, IL, 61801, USA  
SO Organometallics (1985), 4(3), 524-8  
CODEN: ORGND7; ISSN: 0276-7333  
DT Journal  
LA English



L4 ANSWER 144 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 101:230485 CASREACT  
TI Novel pyrimidine and 1,3,5-triazine hypolipemic agents  
AU D'Atri, Gaetano; Gomarasca, Piero; Resnati, Giuseppe; Tronconi, Giovanni; Scolastico, Carlo; Sirtori, Cesare R.  
CS LPB Ist. Farm. S.p.A., Milan, Italy  
SO J. Med. Chem. (1984), 27(12), 1621-9  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English



L4 ANSWER 145 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 101:54800 CASREACT



V. Balasubramanian

TI Stereospecific synthesis of thienamycin from penicillin  
IN Amato, Joseph S.; Karady, Sandor; Weinstock, Leonard M.  
PA Merck and Co., Inc. , USA  
SO U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 257,695, abandoned.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4444685	A	19840424	US 1982-391032	19820622
	US 4525582	A	19850625	US 1984-572794	19840123
PRAI	US 1981-257695		19810427		
	US 1982-391032		19820622		

L4 ANSWER 146 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 101:23464 CASREACT  
TI 2-Chlorobenzothiazole from 2-mercaptobenzothiazole  
IN Steffan, Guido  
PA Bayer A.-G. , Fed. Rep. Ger.  
SO Ger. Offen., 8 pp.  
CODEN: GWXXBX

DT Patent  
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3234531	A1	19840322	DE 1982-3234531	19820917
	DE 3234531	C2	19910704		
	JP 59070678	A2	19840421	JP 1983-167659	19830913
	JP 05020431	B4	19930319		
	BE 897750	A1	19840314	BE 1983-211528	19830914
PRAI	DE 1982-3234531		19820917		

L4 ANSWER 147 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 101:23243 CASREACT  
TI Reactions of 3-chloro-2H-thiete 1,1-dioxide  
AU Sedergran, Thomas C.; Yokoyama, Masataka; Dittmer, Donald C.  
CS Dep. Chem., Syracuse Univ., Syracuse, NY, 13210, USA  
SO J. Org. Chem. (1984), 49(13), 2408-12  
CODEN: JOCEAH; ISSN: 0022-3263

DT Journal  
LA English

L4 ANSWER 148 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 100:210011 CASREACT  
TI Vinylthiochlorophosphoranes  
AU Danchenko, M. N.; Sinitisa, A. D.  
CS Inst. Org. Khim., Kiev, USSR  
SO Zh. Obshch. Khim. (1984), 54(2), 473-4  
CODEN: ZOKHA4; ISSN: 0044-460X

DT Journal  
LA Russian

V. Balasubramanian

L4 ANSWER 149 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 100:103054 CASREACT  
TI 7-Oxo-4-thia-1-azabicyclo[3.2.0]heptane derivatives  
IN Ross, Barry Clive; Johnson, Graham  
PA Hoechst U. K. Ltd., UK  
SO Eur. Pat. Appl., 47 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 91576	A2	19831019	EP 1983-102818	19830322
	EP 91576	A3	19831214		
	EP 91576	B1	19870729		
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	AT 28648	E	19870815	AT 1983-102818	19830322
	JP 58174385	A2	19831013	JP 1983-49105	19830325
	GB 2118546	A1	19831102	GB 1983-8276	19830325
	GB 2118546	B2	19860820		
	CA 1206148	A1	19860617	CA 1983-424484	19830325
	GB 2159519	A1	19851204	GB 1985-16150	19850626
	GB 2159519	B2	19860820		
	CA 1210772	A2	19860902	CA 1985-487762	19850730
	CA 1211118	A2	19860909	CA 1985-487761	19850730
	US 4675396	A	19870623	US 1985-798858	19851118
PRAI	GB 1982-8983		19820326		
	EP 1983-102818		19830322		
	US 1983-478473		19830324		
	CA 1983-424484		19830325		
	GB 1983-8276		19830325		

L4 ANSWER 150 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 100:51545 CASREACT  
TI 2-Benzazepines. 8. Zerovalent nickel mediated biaryl synthesis of an  
anxiolytic pyrimido[5,4-d][2]benzazepine  
AU Coffen, David L.; Schaer, Beatrice; Bizzarro, Fred T.; Cheung, Julia B.  
CS Res. Dev. Div., Hoffmann-La Roche Inc., Nutley, NJ, 07110, USA  
SO J. Org. Chem. (1984), 49(2), 296-300  
CODEN: JOCEAH; ISSN: 0022-3263  
DT Journal  
LA English

L4 ANSWER 151 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 100:34506 CASREACT  
TI Condensed 1,2,4-triazines. Regioselective condensations with  
benzo[h]quinoline-5,6-dione  
AU Eid, Mohga M.; Badawy, Mohamed A.; Ibrahim, Yehia A.  
CS Fac. Sci., Cairo Univ., Giza, Egypt  
SO J. Heterocycl. Chem. (1983), 20(5), 1255-8  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal

V. Balasubramanian

LA English

L4 ANSWER 152 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 99:70837 CASREACT  
TI Synthesis of 4-phosphorylated oxazoles and thiazoles  
AU Brovarets, V. S.; Lobanov, O. P.; Drach, B. S.  
CS Inst. Org. Khim., Kiev, USSR  
SO Zh. Obshch. Khim. (1983), 53(3), 660-4  
CODEN: ZOKHA4; ISSN: 0044-460X  
DT Journal  
LA Russian

L4 ANSWER 153 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 99:5069 CASREACT  
TI Reactivity constants of complex substituents. 2-Substituted and  
6-substituted 4-pyrimidyl groups  
AU Baram, S. G.; Shkurko, O. P.; Mamaev, V. P.  
CS Novosib. Inst. Org. Khim., Novosibirsk, USSR  
SO Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk (1983), (2), 111-17  
CODEN: IZSKAB; ISSN: 0002-3426  
DT Journal  
LA Russian

L4 ANSWER 154 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 98:215407 CASREACT  
TI Antibacterial penem derivatives  
IN Cooke, Michael David; Ross, Barry Clive  
PA Hoechst U. K. Ltd., UK  
SO Eur. Pat. Appl., 173 pp.  
CODEN: EPXXDW  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 69377	A2	19830112	EP 1982-105989	19820705
	EP 69377	A3	19830413		
	EP 69377	B1	19880622		
	R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
	ES 513672	A1	19830401	ES 1982-513672	19820702
	AT 35269	E	19880715	AT 1982-105989	19820705
	FI 8202401	A	19830109	FI 1982-2401	19820706
	FI 77661	B	19881230		
	FI 77661	C	19890410		
	JP 58074687	A2	19830506	JP 1982-117623	19820706
	IL 66245	A1	19880531	IL 1982-66245	19820706
	DK 8203058	A	19830109	DK 1982-3058	19820707
	AU 8285702	A1	19830113	AU 1982-85702	19820707
	AU 562008	B2	19870528		
	ZA 8204830	A	19830629	ZA 1982-4830	19820707
	CA 1225392	A1	19870811	CA 1982-406827	19820707
	GB 2102798	A	19830209	GB 1982-19773	19820708
	GB 2102798	B2	19851211		

V. Balasubramanian

ES 516864	A1	19830916	ES 1982-516864	19821027
ES 516863	A1	19840116	ES 1982-516863	19821027
US 4585767	A	19860429	US 1984-619703	19840614
GB 2151630	A1	19850724	GB 1985-841	19850114
GB 2151630	B2	19860212		
CA 1218663	A2	19870303	CA 1986-500915	19860131
US 4772692	A	19880920	US 1986-854998	19860422
AU 8770972	A1	19870827	AU 1987-70972	19870402
AU 8770973	A1	19870827	AU 1987-70973	19870402
AU 8770974	A1	19870827	AU 1987-70974	19870402
PRAI GB 1981-21108		19810708		
GB 1982-7136		19820311		
EP 1982-105989		19820705		
US 1982-395646		19820706		
CA 1982-406827		19820707		
GB 1982-19773		19820708		
US 1984-619703		19840614		

L4 ANSWER 155 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 98:198149 CASREACT  
 TI Pyrimidines. 6. 6-Trifluoromethyl chloropyrimidines and related compounds  
 AU Gershon, Herman; Grefig, Anthony T.; Scala, Alfred A.  
 CS Boyce Thompson Inst. Plant Res., Cornell Univ., Ithica, NY, 14853, USA  
 SO J. Heterocycl. Chem. (1983), 20(1), 219-23  
 CODEN: JHTCAD; ISSN: 0022-152X  
 DT Journal  
 LA English

L4 ANSWER 156 OF 199 CASREACT COPYRIGHT 2001 ACS  
 AN 98:197896 CASREACT  
 TI Antibacterial penem derivatives  
 IN Cooke, Michael David; Ross, Barry Clive  
 PA Hoechst U. K. Ltd., UK  
 SO Eur. Pat. Appl., 102 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	----	-----	-----
PI	EP 69378	A2	19830112	EP 1982-105990	19820705
	EP 69378	A3	19830323		
	EP 69378	B1	19870107		
	R: DE, FR, GB				
	EP 185651	A1	19860625	EP 1986-100522	19820705
	R: DE, FR				
	JP 58074686	A2	19830506	JP 1982-117622	19820706
	GB 2104511	A	19830309	GB 1982-19785	19820708
	GB 2104511	B2	19851211		
	GB 2154576	A1	19850911	GB 1985-842	19820708
	GB 2154576	B2	19860409		
	GB 2151631	A1	19850724	GB 1985-843	19850114
	GB 2151631	B2	19860219		

V. Balasubramanian

	US 4684640	A	19870804	US 1985-718200	19850402
PRAI	GB 1981-21107		19810708		
	EP 1982-105990		19820705		
	US 1982-395641		19820706		
	GB 1982-19785		19820708		

L4 ANSWER 157 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 98:160665 CASREACT  
TI Studies on antitumor agents. V. Syntheses and antitumor activities of 5-fluorouracil derivatives  
AU Yamashita, Junichi; Yamawaki, Ichiro; Ueda, Shuichi; Yasumoto, Mitsugi; Unemi, Norio; Hashimoto, Sadao  
CS Res. Lab., Taiho Pharm. Co., Ltd., Tokushima, 771-01, Japan  
SO Chem. Pharm. Bull. (1982), 30(12), 4258-67  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 158 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 98:72039 CASREACT  
TI Studies on the neuroleptic benzamides. I. Synthesis and antidopaminergic properties of new pyrimidine derivatives  
AU Dostert, P.; Imbert, T.; Ancher, J. F.; Langlois, M.; Bucher, B.; Mocquet, G.  
CS Cent. Rech. Delalande, Rueil-Malmaison, 92500, Fr.  
SO Eur. J. Med. Chem. - Chim. Ther. (1982), 17(5), 437-44  
CODEN: EJMCA5; ISSN: 0009-4374  
DT Journal  
LA English


L4 ANSWER 159 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 98:16559 CASREACT  
TI Sulfurization of azines. V. Preparation of 4-substituted 3-alkylthioquinolines from quinoline  
AU Maslankiewicz, Andrzej; Pluta, Krystian  
CS Inst. Chem. Phys., Silesian Sch. Med., Sosnowiec, 41-200, Pol.  
SO Synthesis (1982), (10), 872-4  
CODEN: SYNTBF; ISSN: 0039-7881  
DT Journal  
LA English

L4 ANSWER 160 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 97:40291 CASREACT  
TI The effect of 5-substituents on the reactivity of 2-chloro- and 2-hydroxypyrimidines  
AU Hannout, I. B.; Johnson, A.  
CS Dep. Polym. Fibre Sci., Univ. Manchester Inst. Sci. Technol., Manchester, M60 1QD, UK  
SO Dyes Pigm. (1982), 3(2-3), 173-82  
CODEN: DYPIDX; ISSN: 0143-7208

V. Balasubramanian


DT Journal  
LA English

L4 ANSWER 161 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 97:23734 CASREACT  
TI Dibenzofurans. IV. 3-(2-Pyrimidinylamino)dibenzofurans  
AU Cristea, I.; Farcasan, V.  
CS Rom.  
SO Stud. Univ. Babes-Bolyai, [Ser.] Chem. (1981), 26(1), 28-33  
CODEN: SUBCAB; ISSN: 0039-3401  
DT Journal  
LA English




L4 ANSWER 162 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 97:6052 CASREACT  
TI Regioselective synthesis of the N-monomethyl derivatives of  
7-deazahypoxanthine  
AU Seela, Frank; Bussmann, Werner; Goetze, Andreas  
CS Fachber. Naturwiss. II, Univ. Paderborn, Paderborn, D-4790, Fed. Rep.  
Ger.  
SO Liebigs Ann. Chem. (1982), (4), 805-12  
CODEN: LACHDL; ISSN: 0170-2041  
DT Journal  
LA German

L4 ANSWER 163 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 96:199623 CASREACT  
TI 3,4-Dihydrothienopyrimidines. II. Synthesis and sodium borohydride  
reduction of 2-substituted 4-chloro- and 4-unsubstituted-thieno[2,3-  
d]pyrimidines  
AU Yamaguchi, Hitoshi; Ishikawa, Fumiyoshi  
CS Res. Inst., Daiichi Seiyaku Co., Ltd., Tokyo, 134, Japan  
SO Chem. Pharm. Bull. (1982), 30(1), 326-32  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English



L4 ANSWER 164 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 96:162471 CASREACT  
TI Perhalomethylthio heterocycles. XI. Perfluoromethylthio-substituted  
N-methylpyrroles; migration of the perfluoromethylthio group  
AU Gerstenberger, M. R. C.; Haas, A.; Liebig, F.  
CS Ruhr-Univ. Bochum, Bochum, D-4630, Fed. Rep. Ger.  
SO J. Fluorine Chem. (1982), 19(3-6), 461-74  
CODEN: JFLCAR; ISSN: 0022-1139  
DT Journal  
LA German



L4 ANSWER 165 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 96:142845 CASREACT  
TI 2,6-Dichlorobenzoxazole and 2,6-dichlorobenzothiazole

V. Balasubramanian

IN Knorr, Harald; Handte, Reinhard; Willms, Lothar; Tammer, Thomas  
PA Hoechst A.-G. , Fed. Rep. Ger.  
SO Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 43573	A1	19820113	EP 1981-105184	19810704
	EP 43573	B1	19830831		
	R: CH, DE, FR, GB, IT, NL				
	DE 3025910	A1	19820204	DE 1980-3025910	19800709
	US 4433153	A	19840221	US 1981-281215	19810707
	IL 63247	A1	19840930	IL 1981-63247	19810707
	CA 1168246	A1	19840529	CA 1981-381302	19810708
PRAI	DE 1980-3025910		19800709		

L4 ANSWER 166 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 95:203842 CASREACT

TI Chlorination of 3-mercapto-5-(4-alkoxybenzyl)-1,2,4-triazoles

AU Avetisyan, A. Kh.; Ovsepyan, T. R.; Engoyan, A. P.; Grigoryan, R. T.

CS Inst. Tonk. Org. Khim. im. Mndzhoyana, Yerevan, USSR

SO Arm. Khim. Zh. (1981), 34(8), 703-6

CODEN: AYKZAN; ISSN: 0515-9628

DT Journal

LA Russian

L4 ANSWER 167 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 95:150616 CASREACT

TI Synthesis of heterocycles: synthesis of naphtho[4,5-b]thiazolo[2,3-a][1,2,4]triazepines

AU Jain, Moti Lal; Soni, Rajendra Prasad

CS Dep. Chem., Univ. Jodhpur, Jodhpur, India

SO Heterocycles (1981), 16(7), 1077-80

CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

L4 ANSWER 168 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 95:150593 CASREACT

TI 1H-Imidazo[4,5-b]pyrazines. III. 2-Thiols and derivatives

AU Tong, Y. C.

CS West. Div. Res. Lab., Dow Chem. USA, Walnut Creek, CA, 94598, USA

SO J. Heterocycl. Chem. (1981), 18(4), 751-3

CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

LA English

L4 ANSWER 169 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 95:132796 CASREACT

TI Pyrimidine derivatives. II. New synthesis and reactions of

V. Balasubramanian

4-amino-2-methylthiopyrimidine derivatives  
AU Sekiya, Tetsuo; Hiranuma, Hidetoshi; Uchide, Masayuki; Hata, Shunsuke;  
Yamada, Shunichi  
CS Res. Lab., Mitsubishi Pharm. Co., Ltd., Ibaraki, 300-03, Japan  
SO Chem. Pharm. Bull. (1981), 29(4), 948-54  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English

L4 ANSWER 170 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 95:42999 CASREACT  
TI Synthesis of five-membered heterocycles. Reaction of 2-pyridyl  
isothiocyanate with amidrazone hydrochlorides  
AU Santus, Maria  
CS Inst. Agric. Prod. Technol., Sch. Agric., Krakow, Pol.  
SO Acta Pol. Pharm. (1980), 37(3), 293-300  
CODEN: APPHAX; ISSN: 0001-6837  
DT Journal  
LA Polish

L4 ANSWER 171 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 95:7159 CASREACT  
TI Synthesis of some derivatives of 1,2,4-triazole and 1,3,4-thiadiazole  
using N3-substituted amidrazones as starting materials  
AU Bany, Tadeusz; Modzelewska, Bozena; Santus, Maria  
CS Inst. Fundam. Chem., Med. Acad., Lublin, Pol.  
SO Ann. Univ. Mariae Curie-Sklodowska, Sect. AA: Phys. Chem. (1980), Volume  
Date 1976-1977, 31-32, 277-83  
CODEN: ACFCAD; ISSN: 0365-1193  
DT Journal  
LA Polish

L4 ANSWER 172 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 94:156918 CASREACT  
TI Herbicidal diarylamine derivatives  
IN Barton, John Edward Duncan; Serban, Alexander; Watson, Keith Geoffrey  
PA ICI Australia Ltd., Australia  
SO Eur. Pat. Appl., 75 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 18080	A1	19801029	EP 1980-300793	19800314
	EP 18080	B1	19840314		
	R: BE, CH, DE, FR, GB, IT, NL				
	AU 8055985	A1	19800925	AU 1980-55985	19790319
	AU 534093	B2	19840105		
	ZA 8001246	A	19810325	ZA 1980-1246	19800304
	IL 59533	A1	19850131	IL 1980-59533	19800305
	HU 25187	O	19830628	HU 1980-603	19800314
	HU 183116	B	19840428		



V. Balasubramanian

US 4314065	A	19820202	US 1980-131389	19800317
BR 8001618	A	19801118	BR 1980-1618	19800318
JP 55149263	A2	19801120	JP 1980-33480	19800318
JP 04028701	B4	19920515		
ES 489692	A1	19810416	ES 1980-489692	19800318
PRAI AU 1979-8094	19790319			
GB 1979-13065	19790412			
AU 1979-8886	19790522			

L4 ANSWER 173 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 94:83851 CASREACT  
TI Studies on .beta.-lactam synthesis. VI. Exchange of tritylthio and methylthio groups in N-protected alkyl  
2-(trans-4-alkylthio-3-amino-2-oxo-1-azetidiny1)acrylates  
AU Hoppe, Dieter; Kloft, Michael  
CS Org. Chem. Inst., Univ. Goettingen, Goettingen, D-3400, Fed. Rep. Ger.  
SO Liebig's Ann. Chem. (1980), (10), 1527-39  
CODEN: LACHDL; ISSN: 0170-2041  
DT Journal  
LA German

L4 ANSWER 174 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 94:65571 CASREACT  
TI Novel chlorination of the 1,3,4-thiadiazole ring  
AU Dixon, D. D.; Ford, M. E.  
CS Air Prod., Allentown, PA, 18105, USA  
SO J. Heterocycl. Chem. (1980), 17(6), 1311-12  
CODEN: JHTCAD; ISSN: 0022-152X  
DT Journal  
LA English

L4 ANSWER 175 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 94:15636 CASREACT  
TI Pyrazolopyridines. Part 5. Preparation and reactions of pyrazolo[3,4-c]pyridines  
AU Chapman, David; Hurst, Jim  
CS Sch. Pharm., Sunderland Polytech., Sunderland, SR1 3SD, Engl.  
SO J. Chem. Soc., Perkin Trans. 1 (1980), (11), 2398-404  
CODEN: JCPRB4; ISSN: 0300-922X  
DT Journal  
LA English

L4 ANSWER 176 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 93:150262 CASREACT  
TI Cephalosporin analogs and processes for the preparation thereof  
IN Hashimoto, Masashi; Hemmi, Keiji; Aratani, Matsuhiko; Takeno, Hidekazu; Hagiwara, Daijiro  
PA Fujisawa Pharmaceutical Co., Ltd., Japan  
SO Brit. UK Pat. Appl., 41 pp.  
CODEN: BAXXDU  
DT Patent

V. Balasubramanian

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2022092	A	19791212	GB 1979-19486	19790605
	GB 2022092	B2	19830223		
	US 4264597	A	19810428	US 1979-43706	19790530
	DE 2922590	A1	19791220	DE 1979-2922590	19790602
	FR 2428042	A1	19800104	FR 1979-14342	19790605
	FR 2428042	B1	19830520		
	JP 55019250	A2	19800209	JP 1979-70926	19790605
	JP 01007075	B4	19890207		
	CH 644866	A	19840831	CH 1979-5272	19790606
	US 4342760	A	19820803	US 1980-196830	19801014
	GB 2105322	A1	19830323	GB 1981-35339	19811124
	GB 2105322	B2	19830914		
	JP 62070354	A2	19870331	JP 1986-216879	19860912
	JP 01005022	B4	19890127		
PRAI	GB 1978-26421		19780606		
	US 1979-43706		19790530		
	GB 1979-19486		19790605		

L4 ANSWER 177 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 93:132424 CASREACT

TI Acid-catalyzed rearrangement of bis-5,6-dihydro-4H-1,3-thiazin-2-yl and other disulfides and related reactions

AU Barrett, Anthony G. M.; Barton, Derek H. R.; Colle, Roberto

CS Dep. Chem., Imp. Coll., London, SW7 2AY, Engl.

SO J. Chem. Soc., Perkin Trans. 1 (1980), (3), 665-71

CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

L4 ANSWER 178 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 93:95174 CASREACT

TI Condensed isothiazoles. Part 5. Thieno[2,3-d]isothiazoles and thien[3,2-d]isothiazoles

AU Clarke, Kenneth; Fox, William Richard; Scrowston, Richard M.

CS Dep. Chem., Univ. Hull, Hull, HU6 7RX, Engl.

SO J. Chem. Soc., Perkin Trans. 1 (1980), (4), 1029-37

CODEN: JCPRB4; ISSN: 0300-922X

DT Journal

LA English

L4 ANSWER 179 OF 199 CASREACT COPYRIGHT 2001 ACS

AN 92:41874 CASREACT

TI Isomerizations akin to the Dimroth rearrangement. V. Bis-s-triazolo[4,3-a:4',3'-c]pyrimidines and related systems

AU Brown, Desmond J.; Nagamatsu, Tomohisa

CS John Curtin Sch. Med. Res., Canberra, 2601, Australia

SO Aust. J. Chem. (1979), 32(7), 1585-93


CODEN: AJCHAS; ISSN: 0004-9425

DT Journal


V. Balasubramanian

LA English


L4 ANSWER 180 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 91:211216 CASREACT  
TI Reactions of 4-[methyl(or chloro)sulfonyl]-2,3,5,6-tetrabromopyridines  
with nucleophilic reagents  
AU Moshchitskii, S. D.; Zeikans, A.  
CS Inst. Org. Khim., Kiev, 252660, USSR  
SO Khim. Geterotsikl. Soedin. (1979), (7), 937-42  
CODEN: KGSSAQ; ISSN: 0453-8234  
DT Journal  
LA Russian



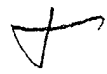
L4 ANSWER 181 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 91:74515 CASREACT  
TI Synthesis of antimicrobial agents. III. Synthesis and antimicrobial  
activities of thiazolo[5,4-b]naphthyridine derivatives  
AU Suzuki, Norio; Dohmori, Renzo  
CS Res. Inst., Daiichi Seiyaku Co., Ltd., Tokyo, Japan  
SO Chem. Pharm. Bull. (1979), 27(2), 410-18  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English




L4 ANSWER 182 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 91:56946 CASREACT  
TI Cyclic guanidines. VI. Synthesis of hypoglycemic tricyclic guanidines  
AU Kosasayama, Akira; Higashi, Kunio; Ishikawa, Fumiyoshi  
CS Res. Inst., Daiichi Seiyaku Co., Ltd., Tokyo, 132, Japan  
SO Chem. Pharm. Bull. (1979), 27(4), 880-92  
CODEN: CPBTAL; ISSN: 0009-2363  
DT Journal  
LA English



L4 ANSWER 183 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 91:5157 CASREACT  
TI Synthesis of imidazo[4,5-b]pyridines  
AU Hayakawa, Isao; Yamazaki, Kenichi; Dohmori, Renzo; Koga, Naofumi  
CS Res. Inst., Daiichi Seiyaku Co., Ltd., Tokyo, Japan  
SO Heterocycles (1978), 10, 241-5  
CODEN: HTCYAM; ISSN: 0385-5414  
DT Journal  
LA English



L4 ANSWER 184 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 90:121500 CASREACT  
TI Synthesis of some 3-substituted-s-triazolo[5,4-b]naphtho[2,1-d]thiazole  
AU Kulkarni, A. P.; Jannawar, S. T.; Deshpande, D. S.  
CS Chem. Dep., Sci. Coll., Nanded, India  
SO J. Indian Chem. Soc. (1978), 55(9), 922-4  
CODEN: JICSAH; ISSN: 0019-4522



V. Balasubramanian

DT Journal  
LA English

L4 ANSWER 185 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 90:103780 CASREACT  
TI Synthesis and properties of 4-mercapto-2,3,5,6-tetrabromopyridine  
AU Moshchitskii, S. D.; Zeikan, A. A.  
CS Inst. Org. Khim., Kiev, USSR  
SO Khim. Geterotsikl. Soedin. (1978), (11), 1514-18  
CODEN: KGSSAQ; ISSN: 0453-8234  
DT Journal  
LA Russian

L4 ANSWER 186 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 88:130730 CASREACT  
TI Synthesis and screening of 8-(4'-thiazolyl)purines  
AU Giner-Sorolla, A.; Segarra, J. T.; Brooks, M. H.  
CS Mem. Sloan-Kettering Cancer Cent., New York, N. Y., USA  
SO J. Med. Chem. (1978), 21(4), 344-8  
CODEN: JMCMAR; ISSN: 0022-2623  
DT Journal  
LA English

L4 ANSWER 187 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 87:184421 CASREACT  
TI Derivatives of pyrazoloanthrone. I. Reactivity of 3-aminopyrazoloanthrone  
AU Galushko, A. M.; Dokunikhin, N. S.  
CS Nauchno-Issled. Inst. Org. Poluprod. Krasitelei, Moscow, USSR  
SO Khim. Geterotsikl. Soedin. (1977), (7), 956-61  
CODEN: KGSSAQ  
DT Journal  
LA Russian

L4 ANSWER 188 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 87:167990 CASREACT  
TI 3-Monosubstituted and 3,6-unsymmetrically disubstituted 1,2,4,5-tetrazines. A general method of synthesis  
AU Mangia, Alberto; Bortesi, Fulvio; Amendola, Umberto  
CS Res. Lab., Pierrel S.p.A., Milan, Italy  
SO J. Heterocycl. Chem. (1977), 14(4), 587-93  
CODEN: JHTCAD  
DT Journal  
LA English

L4 ANSWER 189 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 87:39389 CASREACT  
TI Reaction of 1-methylene-3,5,7-trimethyl-2,4,6,8-tetrathiaprotadamantane with thioacetic acid  
AU Lerman, B. M.; Umanskaya, L. I.; Tolstikov, G. A.  
CS Inst. Khim., Ufa, USSR

V. Balasubramanian

SO Izv. Akad. Nauk SSSR, Ser. Khim. (1977), (3), 638-40  
CODEN: IASKA6  
DT Journal  
LA Russian

L4 ANSWER 190 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 87:23127 CASREACT  
TI New heterocyclic compounds: bis(2-chlorobenzothiazoles). Synthesis.  
Characterization  
AU Blaise, Christian; Bouanane, Abdelhakim; Lochon, Pierre; Neel, Jean  
CS Lab. Chim. Phys. Macromol., Ec. Natl. Super. Ind. Chim., Nancy, Fr.  
SO Bull. Soc. Chim. Fr. (1976), (11-12, Pt. 2), 1843-4  
CODEN: BSCFAS  
DT Journal  
LA French

L4 ANSWER 191 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 86:120300 CASREACT  
TI Pyridopyrimidines. 6. Nucleophilic substitutions in the  
pyrido[2,3-d]pyrimidine series  
AU Anderson, Gary L.; Shim, Jaewon L.; Broom, Arthur D.  
CS Coll. Pharm., Univ. Utah, Salt Lake City, Utah, USA  
SO J. Org. Chem. (1977), 42(6), 993-6  
CODEN: JOCEAH  
DT Journal  
LA English

L4 ANSWER 192 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 85:160011 CASREACT  
TI Fused pyrimidines. I. A one-step synthesis of 3-aminoisothiazolo[3,4-  
d]pyrimidines from 6-aminouracils and Vilsmeier reagents  
AU Furukawa, Yoshiyasu; Miyashita, Osamu; Shima, Shunsuke  
CS Cent. Res. Div., Takeda Chem. Ind., Ltd., Osaka, Japan  
SO Chem. Pharm. Bull. (1976), 24(5), 970-8  
CODEN: CPBTAL  
DT Journal  
LA English

L4 ANSWER 193 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 85:46590 CASREACT  
TI Synthesis of analogs of 5(4)-aminoimidazole-4(5)-carboxamide and purines.  
V. Some reactions of imidazo[4,5-d][1,2,3]triazines  
AU Mokrushin, V. S.; Ofitserov, V. I.; Rapakova, T. V.; Tsaur, A. G.;  
Pushkareva, Z. V.  
CS Ural. Politekh. Inst. im. Kirova, Sverdlovsk, USSR  
SO Khim. Geterotsikl. Soedin. (1976), (4), 556-9  
CODEN: KGSSAQ  
DT Journal  
LA Russian

L4 ANSWER 194 OF 199 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

AN 84:164737 CASREACT  
TI Synthesis and properties of substituted 1,4,2-dithiazines  
AU Fanghaenel, E.  
CS Sekt. Verfahrenskem., Tech. Hochsch. "Carl Schorlemmer" Leuna-Merseburg,  
Merseburg, E. Ger.  
SO J. Prakt. Chem. (1976), 318(1), 127-43  
CODEN: JPCEAO  
DT Journal  
LA German

L4 ANSWER 195 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 84:135547 CASREACT  
TI 2,3,5,6-Tetrahydro-5,6-diphenylimidazo[2,1-b]thiazol-3-one  
AU Ali, Mohamed I.; El-Sayed, Abdou A.; Hammouda, Hamdy A.  
CS Fac. Sci., Univ. Cairo, Giza, Egypt  
SO J. Prakt. Chem. (1976), 318(1), 168-72  
CODEN: JPCEAO  
DT Journal  
LA English

L4 ANSWER 196 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 84:59957 CASREACT  
TI 2-Halogenoadenosines  
IN Kikugawa, Kiyomi; Suehiro, Hideo; Ichino, Motonobu; Nakamura, Tokuro  
PA Kohjin Co., Ltd., Japan  
SO Japan. Kokai, 3 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 50121297	A2	19750923	JP 1974-27725	19740312
	JP 56030356	B4	19810714		

L4 ANSWER 197 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 83:193242 CASREACT  
TI s-Triazines. VII. Synthesis of dihaloheteroaryl-s-triazines. Reaction  
of 2,4,6-trichloro-s-triazine with N-heteroaromatic rings  
AU Chakrabarti, J. K.; Tupper, D. E.  
CS Lilly Res. Cent. Ltd., Windlesham, Engl.  
SO Tetrahedron (1975), 31(16), 1879-82  
CODEN: TETRAB  
DT Journal  
LA English

L4 ANSWER 198 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 83:79185 CASREACT  
TI Pyrimidine derivatives. XXXVII. 2-Substituted  
5-(3',4'-dimethoxybenzyl)-  
and 5-(2'-bromo-4',5'-dimethoxybenzyl)pyrimidines  
AU Aroyan, A. A.; Kramer, M. S.; Saakyan, A. G.

V. Balasubramanian

CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR  
SO Arm. Khim. Zh. (1975), 28(2), 150-4  
CODEN: AYKZAN  
DT Journal  
LA Russian



L4 ANSWER 199 OF 199 CASREACT COPYRIGHT 2001 ACS  
AN 82:57661 CASREACT  
TI Condensed heterotricycles. 10,11-Ring-annealed  
dibenz[b,f][1,4]oxazepines  
AU Nagarajan, K.; Shah, R. K.  
CS Res. Cent., CIBA, Bombay, India  
SO Indian J. Chem. (1974), 12(3), 263-9  
CODEN: IJOCAP  
DT Journal  
LA English

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	261.00	261.15

\*\*\*\*\*

Dear valued customer,

Your feedback is important to us. Would you kindly take a moment to complete our survey? This survey will only take about 5-10 minutes to complete. Your responses will be kept confidential and will help us improve STN Express with Discover! for your future use. Please click on the following link to access the survey.

<http://www.cas.org/ONLINE/STN/ExpressSurveyForm.html?LOGINID=SSSPTA1611BXV>

\*\*\*\*\*

STN INTERNATIONAL LOGOFF AT 14:53:06 ON 22 OCT 2001

V. Balasubramanian

FILE 'LCASREACT' ENTERED AT 16:30:27 ON 08 SEP 2001  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

LCASREACT IS A STATIC LEARNING FILE

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> ....Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=>  
Uploading c:\stnexp4\queries\719508.str

L1 STRUCTURE UPLOADED

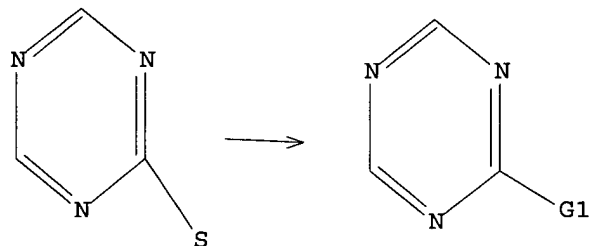
=> que L1

L2 QUE L1

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 N,Cl

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss ful

FULL SEARCH INITIATED 16:31:04 FILE 'LCASREACT'  
SCREENING COMPLETE - 11 REACTIONS TO VERIFY FROM 1 DOCUMENTS

100.0% DONE 11 VERIFIED 0 HIT RXNS 0 DOCS  
SEARCH TIME: 00.00.01

L3 0 SEA SSS FUL L1 ( 0 REACTIONS)

=> file casreact

09/719,508



V. Balasubramanian

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.15	0.30

FILE 'CASREACT' ENTERED AT 16:31:19 ON 08 SEP 2001  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1985 - 2 Sep 2001 (VOL 102 ISS 1 - VOL 135 ISS 10)

>>> Several important enhancements to CASREACT functional group <<<  
>>> searching were introduced. Enter HELP FGA or HELP FGC for more <<<  
>>> information. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

Structure search limits have been increased. See HELP SLIMIT for details.

=> s l1 sss sam

SAMPLE SEARCH INITIATED 16:31:26 FILE 'CASREACT'  
SCREENING COMPLETE - 4 REACTIONS TO VERIFY FROM 2 DOCUMENTS

100.0% DONE 4 VERIFIED 0 HIT RXNS 0 DOCS  
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED VERIFICATIONS: 4 TO 199  
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L1 ( 0 REACTIONS)

=> s l1 sss ful

FULL SEARCH INITIATED 16:31:42 FILE 'CASREACT'  
SCREENING COMPLETE - 192 REACTIONS TO VERIFY FROM 37 DOCUMENTS

100.0% DONE 192 VERIFIED 8 HIT RXNS 4 DOCS  
SEARCH TIME: 00.00.01

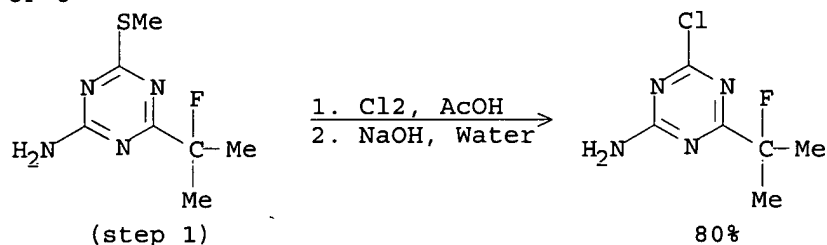
L5 4 SEA SSS FUL L1 ( 8 REACTIONS)

=> d l5 1-4

L5 ANSWER 1 OF 4 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

RX(2) OF 6

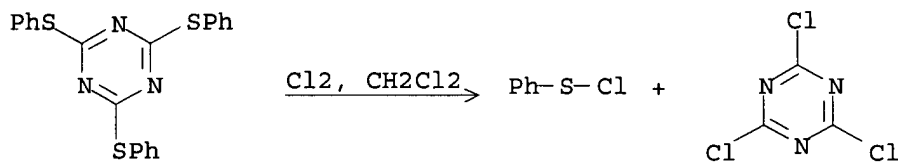


REF: Ger. Offen., 19830902, 13 Jan 2000

NOTE: claimed reaction

L5 ANSWER 2 OF 4 CASREACT COPYRIGHT 2001 ACS

RX(8) OF 13

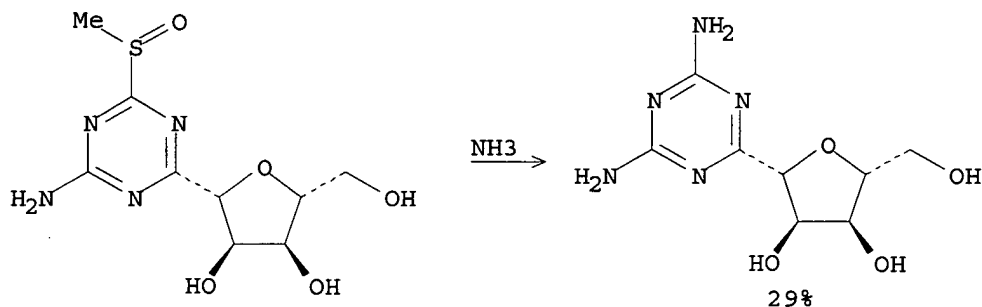


REF: Z. Naturforsch., B: Chem. Sci., 54(5), 609-616; 1999

NOTE: PHOTOCHEM., 100% OVERALL YIELD

L5 ANSWER 3 OF 4 CASREACT COPYRIGHT 2001 ACS

RX(3) OF 14

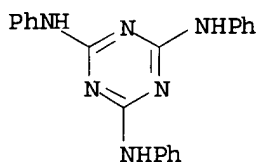
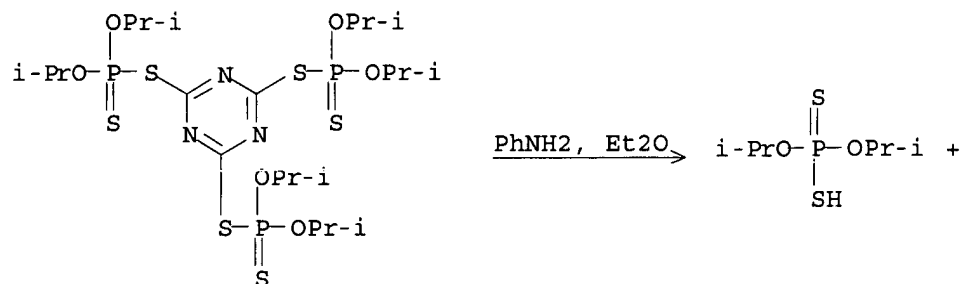


REF: J. Heterocycl. Chem., 23(6), 1709-14; 1986

L5 ANSWER 4 OF 4 CASREACT COPYRIGHT 2001 ACS

V. Balasubramanian

RX(5) OF 5



REF: Zh. Obshch. Khim., 55(12), 2681-91; 1985

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

97.11

97.41

\*\*\*\*\*

Dear valued customer,

Your feedback is important to us. Would you kindly take a moment to complete our survey? This survey will only take about 5-10 minutes to complete. Your responses will be kept confidential and will help us improve STN Express with Discover! for your future use. Please click on the following link to access the survey.

<http://www.cas.org/ONLINE/STN/ExpressSurveyForm.html?LOGINID=SSSPTA1611BXV>

\*\*\*\*\*

STN INTERNATIONAL LOGOFF AT 16:32:04 ON 08 SEP 2001

09/719,508

=>  
Uploading c:\stnexp4\queries\719508.str

L1        STRUCTURE UPLOADED

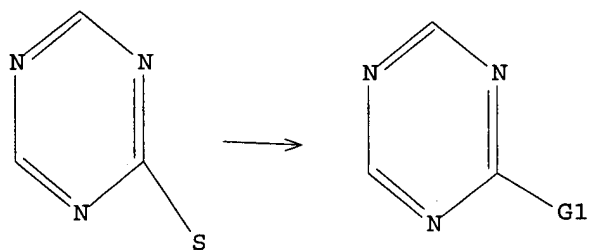
=> que L1

L2        QUE L1

=> d l1

L1 HAS NO ANSWERS

L1                    STR



G1 N, Cl

Structure attributes must be viewed using STN Express query preparation.

V. Balasubramanian

=> s l1 sss sam

SAMPLE SEARCH INITIATED 16:31:26 FILE 'CASREACT'  
SCREENING COMPLETE - 4 REACTIONS TO VERIFY FROM 2 DOCUMENTS

100.0% DONE 4 VERIFIED 0 HIT RXNS 0 DOCS  
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED VERIFICATIONS: 4 TO 199  
PROJECTED ANSWERS: 0 TO 0

L4 0 SEA SSS SAM L1 ( 0 REACTIONS)

=> s l1 sss ful

FULL SEARCH INITIATED 16:31:42 FILE 'CASREACT'  
SCREENING COMPLETE - 192 REACTIONS TO VERIFY FROM 37 DOCUMENTS

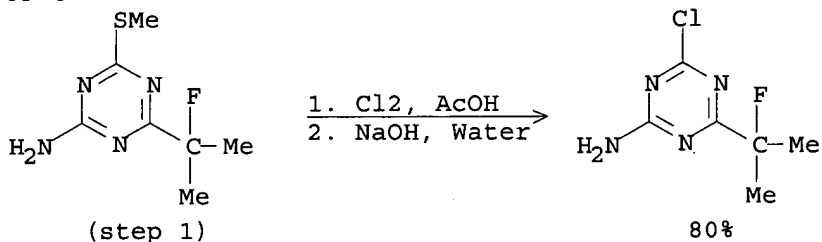
100.0% DONE 192 VERIFIED 8 HIT RXNS 4 DOCS  
SEARCH TIME: 00.00.01

L5 4 SEA SSS FUL L1 ( 8 REACTIONS)

=> d l5 1-4

L5 ANSWER 1 OF 4 CASREACT COPYRIGHT 2001 ACS

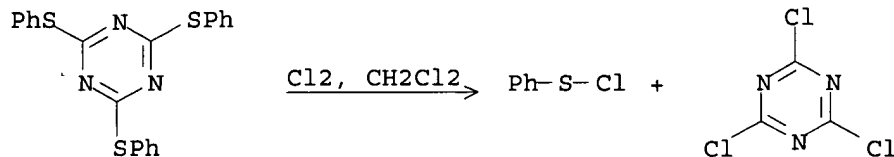
RX(2) OF 6



REF: Ger. Offen., 19830902, 13 Jan 2000  
NOTE: claimed reaction

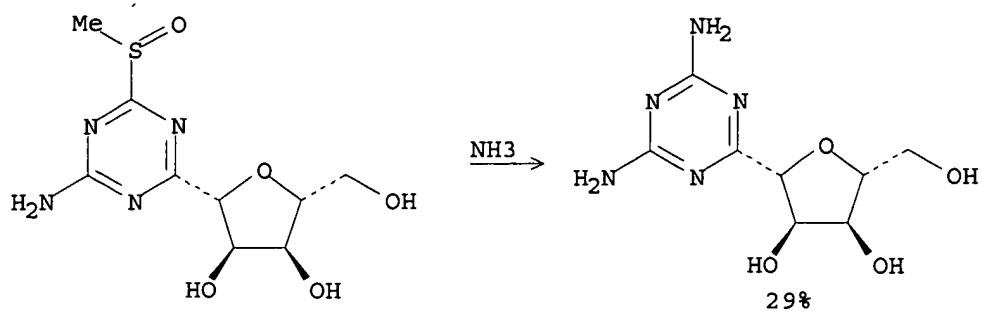
L5 ANSWER 2 OF 4 CASREACT COPYRIGHT 2001 ACS

RX(8) OF 13



REF: Z. Naturforsch., B: Chem. Sci., 54(5), 609-616; 1999  
NOTE: PHOTOCHEM., 100% OVERALL YIELD

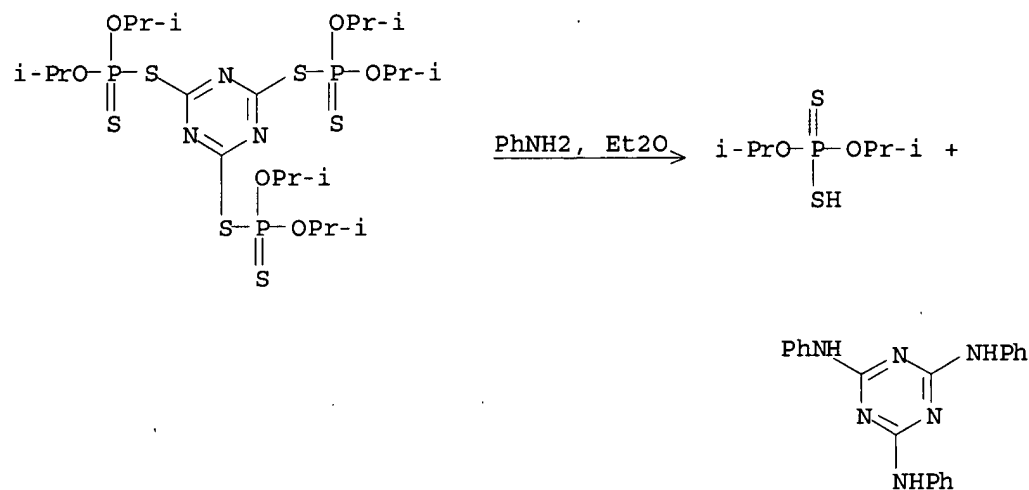
RX(3) OF 14



REF: J. Heterocycl. Chem., 23(6), 1709-14; 1986

L5 ANSWER 4 OF 4 CASREACT COPYRIGHT 2001 ACS

RX(5) OF 5



REF: Zh. Obshch. Khim., 55(12), 2681-91; 1985